68TH ANNUAL CONGRESS

GERIATRIC ORTHOPAEDICS:
OVERCOMING CHALLENGES AND COMPLICATIONS

15-18 November 2017
EDSA Shangri-La Hotel
Mandaluyong City, Philippines
(+632) 930-5797/5766
http://philortho.org

POA 68th Annual Congress Souvenir Program

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MALACAÑAN PALACE
MANILA

MESSAGE

My warmest greetings to the **Philippine Orthopaedic Association, Inc.** on the occasion of its **68th Annual Congress**.

Our goal to create a strong and robust citizenry rests immensely on capable and competent healthcare professionals. The government therefore welcomes this congress which aims to update the knowledge and skills of our orthopaedic specialists. It also introduces them to new strategies and techniques that may help in advancing the quality of medical care in the Philippines.

Your dedication to improve in your field shows your willingness to play a more active role in nation-building. Because of your efforts, I am confident that our people will remain productive contributors in our society. I assure you that this administration will support your initiatives and pursue programs that will ensure real, lasting and meaningful changes in your sector and in our country.

I wish you a productive and eventful congress.

RODRIGO ROA DUTERTE

MANILA
15 November 2017

THE PRESIDENT OF THE PHILIPPINES

Republic of the Philippines
Department of Health
OFFICE OF THE SECRETARY

MESSAGE

Congratulations to the officers and members of the Philippine Orthopedic Association on your 68th Annual Congress.

Recent literature on medicine recognize that, because of the increasing number of fragility fractures among the elderly population, a paradigm shift was needed in how to manage the care of the elderly orthopedic patient. Geriatric orthopedics will provide the most efficient, safe, supportive, and cost-effective musculoskeletal healthcare for elderly patients.

Thus, physicians who specialize in orthopedics, especially in geriatric orthopedics, are essential in our Philippine Health Agenda as we guarantee health services for all life stages and addresses the triple burden of diseases, delivered in functional service delivery networks, with financial freedom to access theses services.

The Philippine Health Agenda hopes to leave these behind some of these legacies: a reduction in out-of-pocket expenditures for health and medicines for the poor; the attainment of universal health insurance coverage for all Filipinos, blood adequacy; the establishment of 24/7 access to health services for all Filipinos.

We are at our last mile in achieving universal health care and we are focusing our attention to improving health services in hard-to-reach, isolated areas and special populations, such as the indigents, those living in institutions, and the street dwellers. They will be provided with the PHA Check up service at least once a year.

As you update yourselves in this gathering, it is my hope that this event will inspire you to work with us to achieve our shared vision of All for Health towards Health for All!

Mabuhay!

PAULYN JEAN B. ROSELL-UBIAL, MD, MPH, CESO II
Secretary of Health

ALL FOR HEALTH
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PRESIDENT

It is with a great pleasure and distinct honor, for me, to convey my heartfelt felicitations and congratulations to the officers and members of the Philippine Orthopaedic Association, Inc., a surgical specialty organization of the Philippine Medical Association, as it holds its 68th Annual Congress on November 15 to 18, 2017 at the EDSA Shangri-La Hotel, Mandaluyong City with the theme entitled: "The Aging Bone: They Are Getting Older, Are We Getting Smarter? ".

Your chosen theme aptly expresses, if I may be allowed to say so, your collective desire to revisit current concepts, practices and approaches in managing disease conditions in your field of interest and specialization and aware of the fact that new technologies abound to provide better and better health outcomes. In other words, the theme, simple as it may seem, carries symbolic words or phrases that also connote the need to level up individual skills or to consider the increasing range of services outside the traditional ways by which an orthopedic surgeon may possibly use to provide them. The passage of the Continuing Professional Development Law about a year ago is one of the compelling reasons why professionals, particularly specialists, should continue honing skills to meet the changing needs and expectations of society. I am confident, therefore, that the program of activities crafted by the organizers will bring about fruitful discussions among your peers that will be enriching and memorable to all the participants.

For and on behalf of the other national officers and members of the board of governors of the Philippine Medical Association, I would like to congratulate, once more, all concern for the successful realization of your 2017 convention.

Thank you and more power to Philippine Orthopaedic Association, Inc.! Mabuhay!

IRINEO C. BERNARDO III, M.D.
President, 2016-2018

PRESIDENT

It is my distinct privilege and pleasure to convey the warmest greetings from the Philippine College of Surgeons Board of Regents to the officers, fellows, residents and guests of the Philippine Orthopedic Association on the occasion of its 68th Annual Congress. Congratulations to the organizing committee for choosing to focus on geriatric orthopedics this year. Indeed, here as in other areas of the world, there is a significant increase in our elderly population who still choose to pursue an active lifestyle. It is truly laudable for the POA to gather experts so that issues unique to our senior citizens may be properly addressed. I am confident that your attendees will emerge from this congress better equipped to handle the challenges of a demanding geriatric orthopedic practice.

On this note, allow me to thank the Philippine Orthopedic Association for steadfastly remaining a pillar of support and strength of the Philippine College of Surgeons. Our fate has been inexorably intertwined since that fateful day in 1949 when Dr. Januario Estrada, Sr., then President of the Philippine College of Surgeons, inducted the first set of officers of the Philippine Society for Trauma and Orthopaedics. I share the aspiration of one esteemed orthopedic surgeon when he wrote: "May POA and PCS continue to strengthen the symbiotic bond that was forged by our highly esteemed and visionary forefathers, a bond that was instrumental in transforming both POA and PCS into internationally recognized organizations, a bond that is vital in ensuring continuous growth and advancement for both organizations which in turn will help POA meet the orthopaedic and surgical challenges of the future".

Mabuhay ang POA!

ENRICO P. RAGAZA, MD, FPCS
President
Philippine College of Surgeons

PRESIDENT

Dear Colleagues,

Welcome to our 68th Annual Congress!

Our meeting this year faces unique challenges to overcome, providing opportunities for excellence. The choice for a main theme allows us to focus on a stimulating and rewarding subject, relevant to our ageing society. Geriatric Orthopaedics has generated great demands from various medical fields, and Orthopaedics is no different. We realize that updated knowledge, current skills and state of the art instruments are only as good as passionate and dedicated attention in order to work together to identify and address problems in this special population.

Your POA Board has chosen the theme "Geriatric Orthopaedics : Overcoming Challenges and Complications" to further this thrust, in the effort to help our elderly, and those slowly entering this age group, to maintain and regain function and independence in order to promote better quality of life. We hope you enjoy the next few days, as we listen to distinguished luminaries not only from our specialty, but from related fields as well, all hailing from near and far, as they share their experience and expertise to promote better overall care of our patients.

Join me and your POA Board, as we enjoy and explore the interesting talks, the lively discussions, the thought-provoking debates, the involving workshops and the animated meetings that are all a testament to our dynamism and zeal for improving Orthopaedic care and management for the Filipino patient.

Mabuhay!

PAUL CESAR N. SAN PEDRO, MD, FPOA
President

OVERALL CHAIRMAN

Welcome to the 68th Annual Congress of the Philippine Orthopaedic Association!

As our population is getting bigger and likewise getting older, the Orthopaedic surgeon is faced with a conundrum; the intricacies of age-related bone and joint disorders with co-morbidities. The theme this year, Geriatric Orthopedics, evolving Challenges and Complications, stresses on this and we have outlined a vast array of lectures by both local and international faculty dealing with it.

The Organizing committee also included Instructional Course Lectures, Research Fora and workshops to involve all the Subspecialties of Orthopedics. Aside from the academic sessions, we also urge you to join us in the Opening Ceremonies and Fellowship on the 15th and the Congress Banquet on the 17th. This convention is for you and without you, it can never be a success.

On behalf of the Organizers, I welcome you all and thank you for coming.

Mabuhay!

CEASAR S. GREY, MD, FPOA
Overall Chairman
68th POA Annual Congress

Republic of the Philippines
City of Mandaluyong
Office of the Mayor

MESSAGE

Congratulations to the **Philippine Orthopaedic Associations, Incorporated** for holding its 68th **Annual Congress** in the City of Mandaluyong. Through the years, the men and women behind this strong organization of professionals focuse on the efficient diagnosis, correction, prevention, and treatment of patients with skeletal deformities - disorders of the bones, joints, muscles, ligaments, tendons, nerves and skin. Apart from bringing innovations in the professional field, the organization puts premium on the further development and advancement of the welfare of each and every member.

This year's congress dwell on the **"Aging Bone: They are Getting Older, Are We Getting Smarter?"** Suffice to speak, this is truly timely to take on the current trends and issues confronting people who have experienced varying health refractions involving skeletal deformities. Approximately 7.5 million musculoskeletal procedures are performed by physicians every year. Back or spine injuries are the most prevalent musculoskeletal impairments while sprains or dislocations and fractures account for almost one-half of all musculoskeletal injuries. While at the helm, the aging population, Arthritis is the leading chronic condition reported by the elderly.

The City Government of Mandaluyong supports the social commitment and corporate responsibility of the Philippine Orthopaedic Association Inc. in employing expertise and charity public service activity for our underprivileged constituents. The existence of the organization for the past 50 years is truly unprecedented. It has grown to 4 regional chapters with 17 accredited training institutions and a little more than a 300 certified fellows spread all over the country, serving the needs of the Filipino people for quality care of their musculo-skeletal afflictions.

Again, congratulations for your continued quest to seek and provide excellence in the field.

Mabuhay ang Philippine Orthopaedic Association, Inc.!

CARMEL TA A. ABALOS
City Mayor

Republic of the Philippines
Department of Health
OFFICE OF THE SECRETARY

13 September 2017

DEPARTMENT CIRCULAR
No. 2017 - 0296

FOR: **ALL UNDERSECRETARIES; ASSISTANT SECRETARIES; DIRECTORS OF BUREAUS, REGIONAL OFFICES AND SERVICES; EXECUTIVE DIRECTORS OF SPECIALTY HOSPITALS; CHIEFS OF MEDICAL CENTERS, HOSPITALS, SANITARIA AND INSTITUTES; AND OTHERS CONCERNED**

SUBJECT: **68th Annual Congress of the Philippine Orthopaedic Association, Inc. on November 15-18, 2017 at the EDSA Shangri-La Hotel, Mandaluyong City**

The Philippine Orthopaedic Association, Inc. will be holding its 68th Annual Congress on November 15-18, 2017 at the EDSA Shangri-La Hotel, Mandaluyong City with the theme "THE AGING BONES: THEY ARE GETTING OLDER, ARE WE GETTING SMARTER?".

Attendance of concerned DOH employees to the said activity shall be on **Official Time,** and at no expense to the government except salaries.

All other transactions shall be in accordance with Department Order No. 2007-0053 "Guidelines on the Attendance to Conventions/Seminars/Conference and Similar Human Resource Development Activities Outside of the Department of Health" and "DO No. 2014-0094 Guidelines on the Allowable Rates of Payment for Human Resource Development Activities".

Attached is the letter of invitation with other details for your ready reference.

Dissemination of the information to all concerned is requested.

By Authority of the Secretary of Health:

ROGER P. TONG-AN, DMPA, MAN, RN
Undersecretary of Health
Office for Health Service Development

emr-POA-09-50

Building 1, San Lazaro Compound, Rizal Avenue, Sta. Cruz, Manila 1003 • Trunk Line 651-7800 local 1113, 1108, 1135
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POA 68th Annual Congress

INDUCTEES

New Fellows

ANGELI CHARMEINN P. APALISOC, MD, FPOA [POC]

RAMBO V. AROCENA, MD, FPOA [PGH]

RINRI P. AUSTRIA, MD, FPOA [DLSUMC]

PEIMON B. BADIEE, MD, FPOA [POC]

CHRISTOPHER JESSE S. CANTO, MD, FPOA [POC]

JAN MELBURGO S. CHIU, MD, FPOA [CLMMRH]

GIAN KARLO P. DADUFALZA, MD, FPOA [POC]

RUEL A.
DELA CRUZ, MD, FPOA
[PGH]

MANUEL H.
ESPALDON, JR., MD, FPOA
[MMC]

GIANCARLO R.
EUROPA, MD, FPOA
[EAMC]

THYAM T.
FOOKSON, MD, FPOA
[CHH]

REY LUTHER C.
ITCHON, MD, FPOA
[POC]

DANDRO PAULO M.
LAT, MD, FPOA
[PGH]

VICTOR ALLAN M.
LIM, MD, FPOA
[POC]

New Fellows

JUNE R. MALANA, MD, FPOA [BGH]

JANMICHAELBEN G. MIRANDA, MD, FPOA [AFPMC]

RANDOLPH D. MOSELINA, MD, FPOA [AFPMC]

DYAN F. PANGILINAN-DOCENA, MD, FPOA [SLMC]

SHAUN A. PORRAS, MD, FPOA [CLMMRH]

GENRICH N. REOYAN, MD, FPOA [PGH]

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MELVIN V. VALERA , MD, FPOA [POC]

ALVIN RAY L. YU, MD, FPOA [USTH]

PROGRAM AT-A-GLANCE

TIME	NOV 15, (Wednesday)	NOV 16, (Thursday)	NOV 17, (Friday)	NOV 18, (Saturday)
0700		ICL 4: PSoWOSi ICL 5: PShS RESEARCH SESSION II	ICL 6: POTS ICL 7: POWCDLS	
0730	REGISTRATION			
0800	WORKSHOP I: Percutaneous Laser Disc Decompression			
0830	RESEARCH I: RESEARCH FORUM			PLENARY SESSION VIII: OSTEOPOROSIS
0900	SPECIAL SESSION I: PHKS	PLENARY SESSION I & II: Two Ways to Skin the Cat Part I & II	ELECTIONS PLENARY SESSION III & IV: Two Ways to Do It Part I & II	
0930				
1000				PLENARY SESSION IX: PHILIPPINE ORTHOPAEDIC SOCIETY FOR SPORTS MEDICINE
1030				
1100	PBO MEETING			
1130				CLOSING CEREMONY
1200	LUNCH SYMPOSIUM I: Johnson & Johnson	LUNCH SYMPOSIUM II: MSD Philippines	LUNCH SYMPOSIUM III: Pfizer Philippines	
1230				
0100	ICL I: POFAS ICL II: PMTS ICL III: POSSM	SPECIAL SESSION II: PRC SYMPOSIUM	PLENARY SESSION IV: Geriatric Orthopaedics	
0130	WORKSHOP II: TRANSMEDIC	SPECIAL SESSION III: PBO RESIDENTS		
0200		POA ANNUAL BUSINESS MEETING	PLENARY SESSION V: AHSP	
0230				
0300	OPENING CEREMONIES		PLENARY SESSION VI: PSS SPECIAL SESSION IV: PSoWOSi	POA/ORTO/PBO/POAFI "Justice League" Movie Block Screening Cinema I, Bldg. A, SM Mega Mall
0330				
0400				
0430		RESEARCH SESSION III: POSP		
0500				
0530				
0600				
0630		FREE/ALUMNI NIGHT	CONGRESS BANQUET	
0700				
0730	WELCOME RECEPTION			
0930				
1000				
1030				

POA 68th Annual Congress

PROGRAMME OF ACTIVITIES

NOVEMBER 15 (Wednesday)

7:30 **REGISTRATION**

RESEARCH SESSION I *(Palawan I)*
Moderator: Jesse James F. Exaltacion
8:40 Residents' Research Forum

WORKSHOP I: Percutaneous Laser Disc Decompression *(Kamia Room)*
Moderator/Emcee: Dr. Josh Matthew B. Rosales
09:00am Prayers/Invocation [Manuel Z. Sison]
Welcome Remarks [Bernard P. Antolin]
Introduction of Lecturer [Renan B. Abellera]
09:15 Introduction of Genesis of Back Pain & Principles of PLDD [Jovito C. Lao]
09:45 Clinical/Video Presentation with demonstration techniques – PLDD [Josh Matthew B. Rosales]
10:00 Hands-On Workshop Proper (using model mannequin & C- Arm) and Demonstration of Laser
[Neilson G. Palabrica/Christopher C. Balaba/Giovani O. Abuso]
Closing Remarks [Jovito C. Lao]

11:00 **Philippine Board of Orthopaedics Meeting** *(Isla 3 Ballroom)*

SPECIAL SESSION I: Philippine Hip & Knee Society Symposium *(Palawan 2 & 3)*
Moderator: Jose Fernando C. Syquia
9:00 DDH Surgery [William Joseph Maloney]
9:15 TKR for the Valgus Knee [William Joseph Maloney]
9:30 The Stiff Knee [William Joseph Maloney]
9:45 Kinematic Alignment in TKR [Yeo Seng Jin]
10:00 Open Forum
10:30 Regional Pain Management Ttechniques for TKR in 2017: Which is best? [Christopher S. Mow]
10:45 Outpatient Arthroplasty – The New Trend? [Christopher S. Mow]
11:00 Revision THA: tricks of the trade [Gregorio MS Azores]
11:15 Revision TKR: tricks of the trade [Yeo Seng Jin]
11:30 PHKS Meeting

LUNCH SYMPOSIUM I: : Johnson & Johnson ***[Isla 1 & 2]***
12:00 Shaping the Future of Wound Closure in Orthopedic Surgeries [Jose Antonio G. San Juan]

WORKSHOP II: Triathlon Primary Knee System - Transmedic *(Kamia Room)*
Speaker: Prof. Ross William Crawford

1:00	Registration & Introduction
1:35	Principles of TKR (Surgical procedures/Complications/Implant Selection (PS/CR/TS)
2:15	Triathlon Discussion (Triathlon & the Single Radius/Instrumentation)
3:15	Demonstration & Hands on (Saw Bone)

2:00 **Orientation of New Fellows (Palawan I)**
Speaker: Edwin Jerd T. Siatan

ICL1: Philippine Orthopaedic Foot & Ankle Society *(Palawan 1)*
Moderators: Carlo Angelo V. Borbon & Jovito Ramil B. Paz

1:00	Lesser Toe and Bunionette [Kirby O. Lim]
1:15	Stress Fractures and Morton's Neuroma [Jose Carlos C. Estil, Jr.]
1:30	Hallux Rigidus and Turf Toe [Fernando A. Acance]
1:45	Hallux Valgus [Ai E. Gamboa]
2:00	Open Forum

ICL2: Philippine Musculoskeletal Tumor Society: Soft Tissue Sarcomas: Principles Evaluation and Management *(Palawan 3)*
Moderators: Albert Jerome C. Quintos/Melito Antonio P. Ramos

1:00	Recognition of STS: Evaluation and Diagnostic Modalities [Czar Louie L. Gaston]
1:15	Principles of STS Surgery [Edward H.M. Wang]
1:30	Adjuvant Chemotheraphy and Radiation Complications [Judith Valerie M. Akol]
1:45	Pitfalls and Avoiding Complications in Soft Tissue Sarcoma Management [Rafael S. Claudio]
2:00	Open Forum

ICL3: Philippine Orthopaedic Society for Sports Medicine: Patellofemoral Disorders *(Palawan 2)*
Moderator: Janis Ann F. Espino-De Vera

1:00	Anatomy and Biomechanics [Ai E. Gamboa]
1:15	Patellofemoral Syndromes [Erwin Brian L. Cantiller]
1:30	Instability [Raphael Angelo C. Jurilla]
1:45	Chondral Lesions [Lyndon L. Bathan]
2:00	Open Forum

3:00 **OPENING CEREMONY**
7:30 **WELCOME RECEPTION**

NOVEMBER 16 (Thursday)

INSTRUCTIONAL COURSE LECTURES (ICL)

ICL 4: Philippine Society of Women Orthopaedic Surgeons Inc. *(Palawan I)*

Moderators: Janis Ann F. Espino-de Vera & Maria Adelwisa G. Belen

7:00 Peculiarities of the Female Anatomy [Rosalyn P. Flores]
7:20 Female Pediatric Orthopedic Disorders [Candice Elaine C. Lim]
7:40 Patellofemoral Pain Syndrome in the Female Population [Angelo R. Leaño]
8:00 Open Forum

ICL 5: Philippine Shoulder Society *(Palawan 2)*

Moderator: Herminio R. Valenzuela, Jr.

7:00 Treatment Options in Rotator Cuff Tears - Partial Tears to Irreparable [Jason Paul P. Santiago]
7:15 Biceps Tendon Pathologies - Ignore, Tenotomize or Tenodesis [Jeremy James C. Munji]
7:30 Shoulder Hemiarthroplasty for Proximal Humeral Fractures [Carlo Angelo V. Borbon]
7:45 Reverse Total Shoulder Arthroplasty [Jonathan C. Ronquillo]
8:00 Open Forum

RESEARCH SESSION II *(Palawan 3)*

7:00 Free Paper Presentations

PLENARY SESSION I: TWO WAYS TO SKIN THE CAT [Part I] *(Isla Ballroom)*

Moderators: Edwin Jerd T. Siatan & Jose Fernando C. Syquia

9:00 Orthogeriatrics: Is this a Different Ballgame? [Tak-Wing Lau]
9:20 Common Acetabular Fractures: What Can I Fix [Maria Adelwisa G. Belen]
9:40 Total Hip Arthroplasty After Acetabular Fractures [Christopher S. Mow]
10:00 Femoral Neck Fractures in the Elderly: Fixation Still Works [Manolito M. Flavier]
10:20 Femoral Neck Fractures in the Elderly: THA [William Joseph Maloney]
10:40 Genetically Modified Stem Cells in Bone Tissue Engineering [Chang Yu Han]
10:55 Role of Antibiotic Loaded Bone Cement in Knee Periprosthetic Joint Infection [Chang Yu Han]
Open Forum

11:10 Inova Video presentation

PLENARY SESSION II: TWO WAYS TO SKIN THE CAT [Part II] *(Isla Ballroom)*
Moderators: Ernesto C. Tenorio/Peter B. Bernardo

11:20 Peritrochanteric Fractures: Do Elderly Patients Deserve More? [Jerome Anthony S. Asuncion]
11:40 Peritrochanteric Fractures in the Elderly: Hip Replacement Works Better [Antonio N. Tanchuling, Jr.]
12:00 Subtrochanteric Fractures: Should We Fear the Atypical Fracture? [Tak-Wing Lau]

LUNCH SYMPOSIUM II: MSD *(Isla Ballroom)*

12:20 The Challenges in Battling Musculoskeletal Pain [Miles T. Dela Rosa]

SPECIAL SESSION II *(Isla Ballroom)*

1:20 PRC Symposium [Clarita C. Maaño]

SPECIAL SESSION III: Special Program for PBO Residents *(Palawan)*

1:20 What Happens after Residency and the True Lessons I Learned [David T. Endriga]
1:40 Why I Did My Research: A Hitchhiker's Guide to Research [Paul Julius Medina]
2:00 Ethics [Oscar Victor A. Tagulinao]
2:20 Inspirational Talk [William Joseph Maloney]
2:40 Technical Training for the PBO E-Logbook [John Jay Yuvallos/Rich Tuadles]

2:20 POA ANNUAL BUSINESS MEETING *(Isla Ballroom)*

RESEARCH SESSION III: Pediatric Orthopaedic Society of the Philippines *(PalawanII)*

4:00 Interesting Case Presentations [Carlo Emmanuel J. Sumpaico]

ALUMNI NIGHT

NOVEMBER 17 (Friday)

INSTRUCTIONAL COURSE LECTURES (ICL)

ICL 6 PHILIPPINE ORTHOPAEDIC TRAUMA SOCIETY: Revisiting the Approaches to the Pelvis and Acetabulum *(Palawan II)*

Moderator: Joseph L. Lai

7:00 Anterior Surgical Approaches to the Acetabulum: Modified Stoppa vs. Ilioinguinal Approach [Irewin A. Tabu]
7:25 Posterior Approaches to the Pelvis and Acetabulum [Maria Adelwisa G. Belen]
7:50 A Safe Surgical Hip dislocation [Benjamin U. Chua III]
8:15 Open Forum

ICL 7 PHILIPPINE ORTHOPEDIC WOUND CARE AND DIABETIC LIMB SOCIETY *(Palawan I)*

7:00 Tools Tips & Tricks for the Application of NPWT [Jerome Anthony S. Asuncion]

8am-3pm POA & PBO Officers 2018 Elections

PLENARY SESSION III: TWO WAYS TO DO IT [Part 1] *(Isla Ballroom)*

Moderators: Reynaldo E. Ang & Andrew Gabriel J. Tabberrah

9:00 Fractures about the Knee: All can be Fixed! [Jean Pierre F. Leung]
9:20 Fractures about the Knee: Replacement works best [Yeo Seng Jin]
9:40 The Role of Stems in TKR in the Elderly [William Joseph Maloney]
10:00 Arthroplasty in the Old: To Cement or Not to Cement [Sureshan Sivananthan]

10:20 iNova Pharmaceutical Video Presentation

PLENARY SESSION IV: TWO WAYS TO DO IT [Part II] *(Isla Ballroom)*

Moderators: Jose Antonio G. San Juan & William T. Lavadia

10: 30 The Cemented Total Hip: From Primary to Revision [Ross William Crawford]
10:50 The Role of Cement Augmentation in Fracture Fixation [Tak-Wing Lau]
11:10 Periprosthetic Hip Infections: How I Manage This [Ross William Crawford]
11:30 Perioperative Medical Management of the Orthopaedic Total Joint Patient [Christopher S. Mow]
11:50 Role of Bisphosphonates after Total Joints & Fracture Fixation [Sureshan Sivananthan]

LUNCH SYMPOSIUM III: Pfizer (Isla Ballroom)

12:10 Neuropathic Pain in Geriatric Orthopaedic Patients [Jose Antonio G. San Juan]

PLENARY SESSION V: GERIATRIC ORTHOPAEDICS *(Isla Ballroom)*

Moderators: Jose Maria R. Coruña & Virginia C. Cabling

1:10 Pain Management in the Elderly [Maria Lilybeth R. Tanchoco]
1:30 Saving the Life of Geriatric Orthopedic Patients [Peñafrancia C. Cano]
1:50 Role of Rehab in Degenerative Joint Management [Mary Jeanne O. Flordelis]
2:10 Open Forum

PLENARY SESSION VI: ASSOCIATION OF HAND SURGEONS OF THE PHILIPPINES *(Isla Ballroom)*

Moderators: Emmanuel P. Estrella & Frederic A. Montaño

2:15 Basal Thumb Arthritis: Current Diagnosis and Treatment [Henry M. Calleja]
2:35 Post-traumatic Arthritis of the Wrist [John Hubert C. Pua]
2:55 The Management of Different Arthritidis of the Hand [Nathaniel S. Orillaza, Jr.]
3:15 Open Forum

SPECIAL SESSION IV: PHILIPPINE SOCIETY OF WOMEN ORTHOPAEDIC SURGEONS, INC. *(Palawan I)*

300 Coffee break
3:45 Power Dressing [Geraldine Zamora-Racaza]
4:15 Make Up Tips [Aileen de Leon]
4:45 Basic Skin Care [Christine Pearl Fernandez-Arandia]
5:15 Break Out

PLENARY SESSION VII: Philippine Spine Society (Isla Ballroom)

Moderators: Jose Martin S. Paiso & Adrian B. Catbagan

3:25 Fixation in the Osteoporotic Spine (Rafael C. Bundoc)
3:40 Cement Augmentation in Osteoporotic Fractures and other Spinal Pathologies (Jose Manuel F. Ignacio)
3:55 Decompression for Lumbar Stenosis: When is Fusion Indicated (Paul Julius A. Medina)
4:10 Less is More: Minimally Invasive Solutions for Degenerative Lumbar Spondylosis (Samuel Arsenio S. Grozman)
4:35 Cervical Spondylotic Myelopathy: When is Laminaplasty NOT Indicated (Franklin M. Dizon III)

4:50 The Degenerative Cascade of Kirkaldy Willis Revisited (Ronald B. Pidlaoan)
5:15 Open Forum

6:30 CONGRESS BANQUET [Isla Ballroom]

NOVEMBER 18 (Saturday)

PLENARY SESSION VIII: OSTEOPOROSIS *(Isla Ballroom)*
Moderators: Jesse James F. Exaltacion/Justinian Aquilino Ll Pimentel III

8:30 Fracture Liaison Service [Arturo C. Cañete]
8:50 Bone Densitometry Service: Enhancing Practice [Julie T. Li-Yu]
9:10 Emerging Concepts in Osteoporosis; Challenges and Issues [Miles T. Dela Rosa]
9:30 Open Forum/Snacks

PLENARY SESSION IX: PHILIPPINE ORTHOPAEDIC SOCIETY FOR SPORTS MEDICINE (Isla Ballroom)
Moderators: Janis Ann F. Espino De Vera & Jose Antonio G. San Juan

9:45 The Ageing Knee [James Loh]
10:05 The Old Problem of MLIK: What we can improve on [James Loh]
10:25 Arthroscopic Washing: Why we do it? [Erwin Brian L. Cantiller]
10:45 Practical Applications of PRP [Edgar Michael T. Eufemio]
11:05 Open Forum

11:30 CLOSING CEREMONY

3:00 POA/Organization of Residents Training in Orthopedics/PBO/ POA Foundation, Inc.
"Justice League" Movie Block Screening
Cinema 1, Bldg. A, SM Megamall, Mandaluyong City

POA 68th Annual Congress

RESEARCH SESSIONS

RESEARCH SESSION I: RESIDENTS' RESEARCH FORUM

8:40 AM Nov. 15, 2017 [Palawan I]

Judges: *Dr. Venus C. Rosales; Dr. Melito Antonio P. Ramos; Dr. Jesse James F. Exaltacion*

Opening Remarks
Introduction of Judges
Presentation Guidelines

Presentation Proper

1. Post -Operative DASH Scores of Surgically Treated Distal Radius Fractures in Relation to La Fontaine's Criteria of Instability
2. ***Post-Operative Single-Shot Epidural Fentanyl and Bupivacaine for Postoperative Analgesia after Lumbar Decompression: A Prospective, Double-Blind Randomized Study***
3. Outcomes of Arthroscopic Proximal Biceps Tenodesis at the Articular Margin: A Retrospective Case Series
4. *Inter and Intraobserver Reliability of the Penny and Beit-CURE Radiologic Classification of Pediatric Patients with Chronic Hematogenous Osteomyelitis*
5. Comparison of Pre-Operative MRI, Physical Examination findings versus Intra-Operative Knee Arthroscopy Findings: A 2 year Retrospective Study (Jan 2015-Dec 2016)
6. *A Cadaveric Study on the Safe Placement of Portals for Arthroscopic Snapping Scapula Surgery in Filipino Males*
7. Short-Term Outcomes of Ultrasound-guided versus Blind Corticosteroid Injection of the Subacromial Space of the Shoulder for the Treatment of Impingement Syndrome: A Randomized Control Trial
8. *Which Whiteside's Line?*
9. Association between a Concomitant Anterolateral Ligament Tear and Pivot Shift Before and After Single Bundle Anterior Cruciate Ligament Reconstruction: A Retrospective Cohort Study
10. *Functional Outcome and Proprioception after ACL Reconstruction Using the Pes-Sparing Technique*
11. A Clinical Comparison of SIGN Pediatric Fin Nailing and Flexible Elastic Nailing in Fixation of Femoral Shaft Fractures in Pediatric Patients ages 5-13 Years Old
12. *Open Reamed Interlocked Intramedullary Nailing of Long Bone Fractures of the Lower Limb Using Surgical Implant Generation Network (SIGN) Nails: Radiographic Results and Clinical Outcomes at a Minimum of 12 Months Follow-up*

RESEARCH SESSIO II: PODIUM PRESENTATION

7:00 AM Nov. 16, 2017 [Palawan III]

Moderators: Dr. Melito Antonio P. Ramos/Dr. Jesse James F. Exaltacion

6 Minutes presentation & 1 minute Q&A
Opening Remarks

Presentation Proper

1. Medial Synovial Plica and Medial Femoral Condyle Cartilage Degeneration: Arthroscopic Classification
2. Using 3D-Printed Customized Model to Assist in Localizing an Inferiorly Displaced Meniscal Flap Tear: A Case Report
Chee Hoe Kong, Janmichaelben G. Miranda, Wilson Wang
3. Relationship of Sagittal Spino Pelvic Alignment, Facet Jointangle, and Gender of Patients with Degenerative Spondylolisthesis among Adult Patients Aged 40 and Above in Chong Hua Hospital (Fuente): A Three-Year Retrospective Study
4. Avulsion Fracture of the Calcaneal Tuberosity Treated With a New Technique
Joven Cantos, MD, Jonathan Ronquillo, MD, FPOA
5. Correlation among Clinical, Radiographic, and Patient-Reported Outcomes after Operative Treatment of Distal Radius Fractures
6. Functional Outcome after Arthroscopic Anterior Cruciate Ligament Reconstruction Using Hamstring Tendon Graft in Philippine Orthopedic Center
7. A Cost Utility Analysis between Conservative and Delayed Surgical Management of Tibial Shaft Fractures
8. Outcomes of Patients with Unstable Intertrochanteric Fracture Treated with Dynamic Condylar Screw versus Proximal Femoral Lock Plate in a Delayed Surgical Setting
9. On Thin Ice: A Retrospective Study on Ice Skating-Related Injuries Seen at a Tertiary Hospital
10. A Cohort Study on Continued Sports Activity Using the American Orthopaedic Foot and Ankle Society Scoring After Rehabilitation in Patients with Achilles Tendinopathy
Adriel Vincent L. Ang, MD, Carmelo L. Braganza, MD, FPOA
11. Pinch Strength Correlation with Carpal Tunnel Syndrome Severity - A Preliminary Study
12. Resection Arthroplasty Following Failed Hip Replacement Surgery at Veterans Memorial Medical Center: An Investigation of the Functional Outcome

Keynote Speaker

WILLIAM JOSEPH MALONEY III, MD, PhD

President, American Academy of Orthopaedic Surgeons

Dr. William J. Maloney, III, M.D., Ph.D., was a Clinical Advisor of Aphelion Capital, LLC. Dr. Maloney served as the Chief of Orthopaedic Surgery at Barnes-Jewish Hospital and a Professor of Orthopaedic Surgery at Washington University School of Medicine. Dr. Maloney is the designer of numerous products and has worked closely with Zimmer Orthopedics and Wright Medical, Inc. Dr. Maloney is an author of over 100 publications. His fellowship training was in Hip and Reconstructive Surgery at Massachusetts General Hospital at Harvard. He has been President of the Board of Directors of American Academy of Orthopaedic Surgeons since March 17, 2017. He served as Co -Chairman of the Scientific Advisory Board at Stemedica Cell Technologies, Inc. He serves as Director of Stemedica Cell Technologies, Inc. He serves as a Member of Scientific Advisory Board of IlluminOss Medical, Inc. He served as Director of ISTO Technologies, Inc. (Isto Biologics). Dr. Maloney's other training took place at Stanford and Columbia. Dr. Maloney specializes in joint replacement and is the Elsbach-Richards Professor in Surgery and professor and chairman of the Department of Orthopaedic Surgery at the Stanford University School of Medicine in Stanford, Calif. He also is a team physician for the Golden State Warriors and San Francisco 49ers. Dr. Maloney worked on several AAOS committees, including the Council on Education. He championed the formation of the American Joint Replacement Registry [2], and chaired its board of directors. Additionally, Dr. Maloney has been a part of board leadership for the Knee Society, the Hip Society, the Western Orthopaedic Association and the American Association of Hip and Knee Surgeons. He is a past president of the Hip Society and a recipient of numerous research awards. Dr. Maloney was on the faculty at the Washington University School of Medicine Department of Orthopaedic Surgery and was chief of orthopaedics at Barnes-Jewish Hospital in St. Louis, Mo. He completed an internship and was junior, senior and chief resident in orthopaedic surgery at Stanford University Medical Center and completed a fellowship in hip reconstruction surgery at Harvard Medical School and Massachusetts General Hospital in Boston. Dr. Maloney earned a Bachelor of Arts degree in psychology at Stanford University and a Medical Degree from the Columbia College of Physicians and Surgeons in New York.

https://www.bloomberg.com/research/stocks/private/person.asp?personId=38720376&privcapId=33378826

POA 68th Annual Congress

FACULTY

FACULTY

FERNANDO A. ACANCE, MD, FPOA

Dr. Fernando A. Acance took his Clinical /Research Fellowship at: the Prince of Wales Hospital, NSW, Foot and Ankle Fellowship under Prof David Lunz, Prof John Negrine and Prof Bill Walsh; St. John of God Hospital, Ballarat, Victoria, Melbourne, Joint Replacement and Reconstructive Surgery under Dr. Andrew Byrne; Clinical Observership and Research Fellow, Private Warrringal Hospital, Heidelberg West, Knee reconstruction and Arthroscopy under Dr. John Bartlett; and Clinical Fellowship, St Lukes Hospital , NSW, Primary, Revision and Resurfacing Hip and Knee Arthroplasty and Knee Arthroscopy Fellowship under Prof Lawrence Kohan.

He is presently affiliated with Manila Doctors Hospital, Bernardino General Hospital, Asian Hospital and Medical Center, The Medical City, National Kidney Transplant Institute and East Avenue and Medical Center

Lecture: Hallux Rigidus and Turf Toe

JUDITH VALERIE M. AKOL, MD, FPOA

Dr. Judith Valerie Mendoza Akol took her Degree in Medicine at the College of Medicine, UP Manila and residency training at the Department of Orthopedics of the UP Philippine General Hospital (PGH).

She had her Fellowship on Musculoskeletal Oncology at the Department of Orthopedics and Traumatology at the Chinese University of Hong Kong. She is currently an active staff of the Cebu Orthopaedic Institute; Department of Orthopedics, Chong Hua Hospital; and a visiting staff at the Department of Surgery, Perpetual Succour Hospital and Department of Surgery, Visayas Community Medical Center all in Cebu City. Dr. Akol is currently a trustee of the Philippine Board of Orthopaedics and a member of the Philippine Musculoskeletal Tumor Society.

Lecture: Adjuvant Chemotheraphy and Radiation Complications

JEROME ANTHONY S. ASUNCION, MD

Dr. Jay S. Asuncion had his AO (Arbeitsgemeinschaft fur Osteosynthesefragen) Trauma fellowship and Minimally Invasive Osteosynthesis training at Queen Mary Hospital, University of Hong Kong, Hong Kong (2008). He has attended several AO specialty courses internationally and is a faculty member of the AO Trauma International, Davos, Switzerland. He had his Wound care and Diabetic Limb Salvage course at Georgetown University, Washington DC, USA.

He is the director of Butuan Orthopedic Institute, Center for Minimally Invasive Fracture Surgery, Wound Care and Diabetic Limb, Osteoporosis and Fragility Fracture in Butuan Doctors' Hospital, where he is the Chairman of the Department of Orthopedics and Traumatology.

He is a fellow of the Philippine Orthopedic Association, Philippine Orthopedic Trauma Society and Association for the Study of Internal Fixation (ASIF/AO).
Dr. Jay is the founding president of the Philippine Orthopedic Wound Care and Diabetic Limb Society, Member of the American Academy of Orthopaedic Surgeons, and an Associate board examiner of the Philippine Board of Orthopedics.

His special interests are Minimally Invasive Fracture Surgery (MIFS), pelvis and acetabular fractures, diabetic limb and wound care, osteoporosis and fragility care and preventive, multimodal analgesia in orthopedic trauma.

Lectures:
Peritrochanteric Fractures: Do Elderly Patients Deserve More?
Tools Tips & Tricks for the Application of NPWT

GREGORIO MS AZORES, MD, FPOA

Dr Gregorio Marcelo S. Azores is an Associate Professor of Orthopedics in the Department of Orthopedics at the Philippine General Hospital, University of the Philippines College of Medicine. He is the Chief of the Joint and Arthroplasty Service in the Department of Orthopedics in the same institution. He previously held an administrative position as Coordinator for Flagship and Special Projects at the Office of the Deputy Director for Administration of the Philippine General Hospital

Dr Azores received his Doctor of Medicine degree from the University of the East Ramon Magsaysay Memorial Medical Center in the Philippines and subsequently had his residency training at the Department of Orthopedics, University of the Philippines - Philippine General Hospital. He had a two-year apprenticeship in the methods of Ilizarov also at the PGH. He had further fellowship trainings in several areas overseas including Arthroplasty and Arthroscopy at The Queen Elizabeth Hospital, University of Adelaide, Australia and Revision Arthroplasty and Lower Extremity Reconstructive Surgery at the Mount Sinai Hospital, University of Toronto, Canada.

Apart from his current appointment with the Philippine General Hospital, Dr Azores is the chief of the Division of Orthopedics, Department of Surgery at the Quirino Memorial Medical Center. He was past President of the Philippine Hip and Knee Society and the ASEAN Arthroplasty Association. Dr Azores has presented in numerous meetings. He is one of the editors and author of two chapters in the Comprehensive Hip and Knee Textbook of the ASEAN Arthroplasty Association. He is Associate Editor of the Philippine Journal of Orthopedics.

Lecture: Revision THA: tricks of the trade

FACULTY

CHRISTOPHER C. BALABA, MD, FPOA

Dr. Tope Balaba is a graduate of orthopaedic residency training the Northern Mindanao Medical Center, Cagayan De oro city. He had his spine fellowship training In Chong Hua Hospital. His interest includes minimally invasive and image guided spine surgeries.

He is a diplomate of Phil Board of Orthopedics and a member of Philippine Spine Society. He is an active training consultant in Northern Mindanao Medical Center.

Facilitator: Percutaneous Laser Disc Decompression

LYNDON L. BATHAN, MD, FPOA

Dr. Lyndon Bathan had his fellowship at Orthopaedic Arthroscopic Surgery International Bioresearch Foundation, Milan, Italy. He finished his Orthopedic residency at the Department of Orthopaedics, UP-PGH. He is a Clinical Associate Professor of Sports and Head of the Sports and Arthroscopy Service at the College of Medicine and Department of Orthopaedics, UP-PGH respectively. He is a visiting consultant/faculty at The Medical City; part time faculty at the Ateneo School of Medicine and Public Health; Volunteer Consultant at the Department of Orthopedics Sports Clinic.

He is currently practicing at the UP-PGH, University Physicians Medical Center, The Medical City (Pasig/Angeles City), Manila Doctors Hospital, Medical Center Manila, Delos Santos Medical Center (SM Megamall), Angeles University Foundation Medical Center and Sacred Heart Medical Center, Angeles City.

Lecture: Chondral Lesions

MA. ADELWISA G. BELEN, MD, FPOA

Dr. Maria Adelwisa G. Belen graduated from St. Luke's College of Medicine-William H. Quasha Memorial. Her clinical internship and residency training in Orthopedics and Sports Medicine were completed at St. Luke's Medical Center Quezon City. After that, she went to finish her fellowship in Traumatology, Pelvis and Acetabular Surgery at the Department of Trauma, Hand and Spine Surgery of University Medical Center Hamburg (Germany)

Presently, she is a fellow of the Philippine Orthopaedic Association, a diplomate of the Philippine Board of Orthopaedics, an officer of the Philippine Orthopedic Trauma Society, a member of AO Trauma Philippines faculty, and a volunteer for Médecins Sans Frontiéres.

Lectures:
Common Acetabular Fractures: What Can I Fix
Posterior Approaches to the Pelvis and Acetabulum

CARLO ANGELO V. BORBON, MD, FPOA

Dr. Carlo Angelo V. Borbon completed his Orthopaedic residency training at the Makati Medical Center and underwent extensive fellowships in Sports Medicine and Hip, Knee, Foot and Ankle Surgery; and another program in Shoulder and Elbow Arthroscopy and Arthroplasty at the ATOS Klinik Heidelberg (Germany). He is currently the president of the Philippine Orthopaedic Foot and Ankle Society and the P.R.O. of the Philippine Orthopaedic Society for Sports Medicine.

His local and international professional memberships include the Philippine Orthopaedic Association, Philippine Orthopaedic Society for Sports Medicine, Philippine Shoulder Society, American Academy of Orthopaedic Surgeons, and the International Society for Arthroscopy, Knee Surgery and Orthopaedic Sports Medicine, Asia-Pacific Society for Foot and Ankle Surgeons and Asian Federation of Foot and Ankle Surgery. He has published several papers in international peer review journals and has been very active in giving lectures for both local and international conferences.

He is a consultant at the Makati Medical Center and the Philippine Orthopaedic Institute. He is also affiliated with the Cardinal Santos Medical Center, Medical Center Manila, De La Salle University Medical Center, Armed Forces of the Philippines Medical Center, Capitol Medical Center, Victor R. Potenciano Medical Centre and Batangas Medical Centre.

Lecture: Shoulder Hemiarthroplasty for Proximal Humeral Fractures
Carlo Angelo V. Borbon, MD, FPOA

Abstract: Hemiarthroplasty is indicated in patients with four-part fractures, headsplitting proximal humerus fractures in elderly patients and in elderly patients with osteoporotic bone who have fracture-dislocations. It can also be considered in patients with three-part fractures and fracture-dislocations when bone quality is poor and the degree of comminution precludes satisfactory reduction and internal fixation. Primary replacement can be considered in younger patients with four-part proximal fractures if acceptable reduction cannot be obtained. The important principles when performing this surgery include the following: the use of a deltopectoral approach, allowing preservation of the deltoid origin and insertion; restoration of humeral length and retroversion, and secure fixation of the tuberosities to the prosthesis, to the shaft and to one another. This procedure offers reliable pain relief and reasonable levels of patient satisfaction, but only modest functional results. Limited use with activities of daily living below shoulder level may be reliably obtained but overhead use is not typical following this surgery. The prognostic factors have been shown to be the age, the delay between injury and surgery, preoperative neurologic deficit, history of cigarette smoking, excessive alcohol consumption and female sex. Tuberosity position and healing may be the most important factors in determining outcome.

FACULTY

RAFAEL C. BUNDOC, MD, FPOA

Dr. Pipo Bundoc is a Professor (7) at the Department of Anatomy, College of Medicine, University of the Philippines; Consultant at the Spine Service, Dept. of Orthopedics, UP – PGH; Head of the Integrated Biomechanical Laboratory, Orthopedic Learning Center; Visiting Physician at the Manila Doctors' Hospital; Member of the Minimally Invasive Spine Surgery Study Group; and Local and foreign resource speaker on Spinal deformity, Minimally invasive spine surgeries and Biomechanics.

He finished orthopedic residency at the Department of Orthopaedics, UP-PGH. He had his Fellowship in Spine Surgery at the Prince of Wales Hospital, Chinese University of HongKong. He has Diploma in Biomechanics, Stratchlyde University, Glasgow, Scotland.

Some of his major awards include: Philippine Talent Search for Young Scientist, Gold Award, given by the National Academy of Science and Technology, 1995; TOYM (The Outstanding Young Men) Award in the Field of Medicine, 1997; Joseph Trueta Fellowship Awards, given by the Nuffield Orthopaedic Center, Oxford University, United Kingdom, 1998; Honorary Fellow of the Girdlestone Society, given by the Nuffield Orthopaedic Center, 1999;

TOYS (The Outstanding Young Scientist) Award given by National Academy of Science and Technology, 2000; Outstanding Philippine Doctors Award given by the Philippine Jaycees in cooperation with Department of Health, World Health Organization and Philippine Medical] Association, 2004; Metrobank Outstanding Teacher for 2005 given by the Metrobank Foundation; and Eisenhower Fellow 2008 given by the Eisenhower Fellowship Foundation.

His areas of expertise are: Cervical Spine Surgery, Scoliosis and Spine Deformity Surgery, Minimally Invasive Spine Surgery, Design/ Innovation of Instruments, Biomechanical Testing, Anatomical Studies, Prosthetic/Orthotic design and 3D Printing surgical applications

Lecture: Fixation in the Osteoporotic Spine

HENRY GERARD MACEDA CALLEJA, MD, PTRP, FPOA

Dr. Henry Calleja had his fellowship in Hand and Microsurgery at the Kleinert Institute, University of Louisville, Louisville, Kentucky, USA and Joint Replacement Fellowship at the Desert Orthopedic Center, Las Vegas, Nevada, USA. He finished residency training at the St. Luke's Medical Center. He topped the PBO Diplomate exams in 2011 and was awarded most outstanding resident in 2010.

Lecture: Basal Thumb Arthritis

Abstract: Osteoarthritis at the base of the thumb also known as Trapezio-Metacarpal Arthritis, or carpometacarpal (CMC) arthritis of the thumb. The basal joint of the thumb is the second most common site of hand osteoarthritis after the DIP joint. This condition is commonly mistaken for de Quervain syndrome, carpal tunnel syndrome, and occult scaphoid fractures.

In this lecture we will present the Current Diagnosis and Treatment for basal joint arthritis.

ARTURO C. CAÑETE, MD, FPOA

Dr. Art Cañete is currently affiliated with the Philippine Orthopaedic Center where he is Senior Consultant of the Trauma Team, Chairman of the Committee on Ethics Research Board, Chairman of the Department of Orthopedics and Chairman of the POC Osteoporosis Clinic - FLS. He is also the Section Head of the Orthopaedic Section and Associate Professor at the Institute Of Medicine in Far Eastern University – (NRMF) Nicanor Reyes Medical Foundation. Dr. Cañete was a Past President of the POA and was a Trustee and current Vice Chairman of the Philippine Board of Orthopaedics.

Lecture: Fracture Liaison Service: An Effective Approach for the Secondary Prevention of Fragilty Fractures

Abstract: Prevalence of fragility fractures has been reported to be reaching epidemic proportions, and they have been observed to be sentinels for increased risk of subsequent fractures with its associated morbidity and mortality. Despite awareness of this major health challenge, and its social impact, limited systems have been established with limited and short term effect in identifying these patients and preventing the cascade of fractures. The current popular approach being recommended today is referred to as the "Fracture Liaison Service (FLS)", which is primarily a coordinator-based program designed for secondary prevention of fragility fractures. This preventive approach has been adopted in several countries worldwide, and an international collaborative initiative has been established to create an environment of sharing of identified challenges, solutions, best practices, as well as outcomes of participating countries. This lecture on FLS is being presented to encourage interested institutions and potential champions for this cause, to consider this approach in their set-up and collaborate in a national effort to bring down the incidence of fragility fractures through their respective local community.

PEÑAFRANCIA C. CANO, MD, DPBA FPSA, EDRA

Dr Peñafrancia Cano is the Chief of the Section of Regional Anesthesia and an Associate Professor in the Department of Anesthesiology at the University of the Philippines - Philippine General Hospital. She is formerly the Chief of the Section of Orthopedic and Ambulatory Anesthesia. She is also a consultant of the Department of Anesthesiology at the Asian Hospital in Alabang. Dr Cano is presently the Chair of the Committee on Continuing Medical Education of the Philippine Society of Anesthesiologists (PSA). She has a European Diploma in Regional Anesthesia which she obtained from the European Society of Regional Anesthesia (ESRA) in Seville, Spain in 2014. She is the very first recipient in the country. She is very well recognized in the subspecialty of Regional Anesthesia . She is a respected speaker both locally and internationally. Dr Cano has spearheaded and directed several conferences and workshops all over the country.

Lecture: Saving the Life of Geriatric Orthopedic Patients

Abstract: Quite often, we encounter elderly patients where we are perplexed as with regards to the type of anesthetic management which we are going to conduct considering the varied pre-existing co-morbidities the patient may have. Based from studies, regional anaesthesia, whether neuraxial or peripheral nerve block (PNB) appears to be safer and has a better post operative surgical outcome especially in the elderly patients as compared to general anesthesia. However, for the medically compromised or unstable elderly patients where a drop in blood pressure is unacceptable, PNB may be the only choice of anesthetic.

PNB as compared to neuraxial block does not cause sympathetic blockade. Although general anesthesia may obviate the concerns regarding the untoward sequelae that is associated with neuraxial block, it has its own adverse effects. Considering these factors, PNB is the most appropriate technique for the medically compromised patient. Several case reports have been published attesting to the usefulness and effectiveness of PNB for lower and upper extremity surgery in patients with an unstable hemodynamic status.

In summary, PNB can result in a better outcome where general anesthesia and neuraxial block may further aggravate the medical condition of clinically unstable patients.

ERWIN BRIAN L. CANTILLER, MD, FPOA

Dr. Erwin Brian Cantiller is a graduate of De La Salle University Medical Center orthopedic residency program. He had his fellowship at the ATOS Hospital of Special Surgery, International Center of Hip, Knee and Foot Surgery – Sports Traumatology, Heidelberg, Germany

Lectures:
Arthroscopic Washing: Why we do it?
Patellofemoral Syndromes

Abstract: Patellofemoral pain is common in young adolescents, with a prevalence of 7-28% and incidence of 9.2%. It is defined by pain around or behind the patella that is aggravated by at least one activity that loads the patellofemoral joint during weight bearing on a flexed knee (eg, squatting, stair ambulation, jogging/running, hopping/jumping). History and physical examination has a key role in the diagnosis while imaging is needed only in some cases. Literature review has shown that Patellofemoral pain syndrome development is multifactorial with various functional disorders of the lower extremity such as patella mal-tracking, dynamic valgus malalignment, muscular dysfunction and some foot disorders. Other sources of pain can come from psychological and neurophysiological factors. Due to the multifactorial nature of Patellofemoral pain, the available evidence suggests that patients are best managed with an individualized, multimodal non-operative treatment program of rehabilitation and activity modification. Treatment includes the use of nonsteroidal anti-inflammatory drugs (NSAIDs) for short-term pain relief, passive correction of patellar mal-tracking with medially directed tape or braces, correction of the dynamic valgus with exercise programs that target the muscles of the lower extremity, hip, and trunk, and the use of foot orthoses in patients with additional foot abnormalities. Non operative treatment should be tried before any surgical intervention.

YU-HAN CHANG, MD, PhD

Dr. Yu-Han Chang is Chief/Professor at the Division of Joint Reconstruction, Department of Orthopaedic Surgery, Linkou Chang Gung Memorial Hospital, Chang Gung University, Gueishan Township, Taoyuan County 333, Taiwan. He had his PhD at the Graduate Institute of Clinical Medicine, Chang Gung University, Taoyuan, Taiwan and MD at Chung Shan Medical University, Taichung, Taiwan.

He is currently Chief, Division of Joint Reconstruction, Department of Orthopaedic Surgery; Vice Chairman, Department of Medical Research; Chairman, Division of Bone and Joint Infection, Bone and Joint Research Center; Professor/Attending Physician, Division of Joint

Reconstruction, Department of Orthopaedic Surgery; and Chairman, Division of stem cell research, Center for tissue engineering. Dr. Chang is also a reviewer of a number journals, has numerous author/co-authorships in medical publications.

Lectures:
Genetically Modified Stem Cells in Bone Tissue Engineering
Role of Antibiotic Loaded Bone Cement in Knee Periprosthetic Joint Infection

BENJAMIN U. CHUA III, MD, FPOA

Dr. Benjamin Chua is a graduate of the Philippine Orthopedic Center residency program. He had his fellowship in Pelvic & Acetabular Surgery at the Universitatsklinikum Des Saarlandes Kliniken Und Institute Fur Chirurgie in Homburg, Germany and a fellowship in Trauma at the Korean University Medical Center, Seoul, South Korea. He is currently a consultant at the Philippine Orthopaedic Center.

Lecture: A Safe Surgical Hip dislocation

Abstract: Femoral head fracture is a relatively uncommon injury. Majority of cases are associated with other injuries such as posterior hip dislocation, posterior acetabular wall and column fractures. The optimum surgical approach still remains controversial. An anterior, posterior, and transtrochanteric surgical approaches have been proposed, but the exposure is limited with classical approaches. A surgical hip dislocation allows for a 360° view of the head and facilitates anatomic reduction for head fractures. The ability to dislocate the hip without disrupting the major blood supply to the femoral head is critical in preventing avascular necrosis. In this lecture, A Safe Surgical Hip Dislocation procedure with the advantage of addressing the associated injuries will be presented.

RAFAEL S. CLAUDIO, MD, FPOA, MBAH

Dr. Claudio is currently Chairman of the Department of Orthopaedics, The Medical City, and an associate professor at the Ateneo School of Medicine and Public Health. As senior consultant in orthopedic oncology, he heads the Musculoskeletal Tumor Section of the Philippine Orthopedic Center. He is a former President of the Philippine Musculoskeletal Tumor Society and past President of the Philippine Society of Oncologists. He is also a member of the International Advisory Board of the Asia-Pacific Musculoskeletal Tumor Society.

Lecture: Pitfalls and Avoiding Complications in Soft Tissue Sarcoma Management

PROF. ROSS WILLIAM CRAWFORD, D.Phil, (Oxon.), FRACS (Orth), MBBS (Qld).

I am currently employed as the Professor of Orthopaedic Research at Queensland University of Technology. As well as being involved in clinical and basic science research I undertake private clinical practice at Holy Spirit Northside Hospital and public and private practice at Prince Charles Hospital.

My fellowship training in primary and revision hip and knee replacement surgery, was at both Oxford and Exeter, UK and lasted 4 years. I completed a D.Phil (Oxon.)

(PhD equivalent) at Oxford University in 2000. Each year an overseas orthopaedic surgeon is trained in our unit in complex lower limb joint replacement surgery. Surgeons from Canada, England, Scotland, Israel, and India have been trained over the last six years. I have lectured in Japan and India each year for the last five years and been an invited lecturer, on hip and knee replacement, at the Malaysian, Thailand, Australian, Japanese, and Indian Orthopaedic Association meetings in the last three years.

As a surgeon who deals only with pathology of the hip and knees much of my practice is dedicated to primary hip and knee replacement and knee arthroscopy surgery. However I have a number of special interests relating to complex problems of the hip and knee. These include revision hip and knee surgery, unicompartmental knee replacement, complex hip reconstruction, including congenital hip dysplasia and computer assisted knee replacement

Lectures:
Principles of TKR (Surgical procedures/Complications/Implant Selection (PS/CR/TS)
Triathlon Discussion (Triathlon & the Single Radius/Instrumentation)

The Cemented Total Hip: From Primary to Revision
Abstract: This talk will discuss the clinical outcomes of cemented and hybrid (cemented stem) THR. Registry data will be presented showing that the outcomes of cemented stems are better than cementless in the majority of registries in all age groups. These improvements are particularly seen in patients over 75 and those with a #NOF.

The ability of polished tapered stems to effectively restore hip anatomy (offset, leg length and version) will be discussed and highlight the advantages when compared to uncemented femoral components.

Revision of a cemented femoral component is far easier than that of a cementless stem. The technique of cement in cement revision will be described and the results presented.

Periprosthetic Hip Infections: How I Manage This
Abstract: This talk will discuss my current treatment algorithms for the infected THR. Infection can be divided into early, chronic and late haematogenous. Each of these types is treated in different ways depending on the timing of the infection. Treatment may vary based on the health of the patient and the infecting organism but broad generalisations can be made.

Early infection is first treated by debridement and implant retention (DAIR). This technique of aggressive debridement and lavage followed by antibiotics has had increasing attention in the literature with good results with regards to eradication of infection and better level of function than patients undergoing 2 stage revision.

One stage revision is gaining popularity as compared with 2 stage for chronic infection. My preferred technique is similar to a one-stage revision but is described as the 'Kiwi' technique. This technique involves the implantation of a cemented THR without aggressive pressurization of cement particularly on the femoral side. The surgical technique and results will be described and the rationale for its use explained.

MILES T. DELA ROSA, MD, FPOA

Dr. Miles T. Dela Rosa finished Medicine at the University of the East Ramon Magsaysay Memorial Medical Center and obtained his orthopedic residency diploma at the Philippine Orthopedic Center. His postgraduate studies includes: Singapore General Hospital-Lee Shaw Fellowship; AO Basic Course and; AO Trauma Fellowship.

Dr. Dela Rosa is a Past President of the POA and ASEAN Orthopaedic Association and a Fellow of the Philippine College of Surgeons. He was also President of the Osteoporosis Society of the Philippines Foundation, Inc.; an Affiliate Member of the American Academy of Orthopaedic Surgeons; Faculty Member, AO Trauma International. He is currently an Assistant Professor at the Far Eastern University-Nicanor Reyes Memorial Foundation, Institute of Medicine and current Chairman of the Department of Surgery, FEU-NRMF Medical Center.

Lectures:
Emerging Concepts in Osteoporosis; Challenges and Issues
The Challenges in Battling Musculoskeletal Pain [Lunch Symposium]

FRANKLIN M. DIZON III, MD, FPOA

Dr. Kit Dizon is a graduate of orthopedic residency at the Philippine Orthopedic Center. He had his fellowship in Spinal Disorders at the Department of orthopaedics, Meijo Hospital, Nagoya, Japan; AO Trauma Fellowship at the University of Kiel, Schleswig-Holstein Medical Center, Department of Trauma Surgery, Kiel, Germany.

He is currently a consultant (Medical Specialist 3) at the: Philippine Orthopedic Center Spine Surgery Unit; St. Luke's Medical Center; University of the East Medical Center and The Medical City (Clark).

Lecture: Cervical Spondylotic Myelopathy: When is Laminaplasty NOT Indicated

DAVID T. ENDRIGA, MD, FPOA

He completed his premedical course of AB Interdisciplinary Studies at the Ateneo de Manila University before taking his medical degree at the University of the East Ramon Magsaysay Memorial Medical Center. He then did his Post Graduate Internship at the UP-Philippine General Hospital and completed his residency Training at the Philippine Orthopedic Center. Dr. Endriga then went on to do his Spine Surgery Fellowships at the Meijo Hospital in Nagoya, Japan and at the Norton Leatherman Spine Center in Louisville, Kentucky.

Lecture: Fellowship: What Happens after Residency and the True Lessons I Learned

Abstract: The completion of residency training is an exciting time but it can also be daunting, filled with questions and uncertainty. New graduates are faced with choices that have long reaching implications that can affect their careers and the path that their lives will eventually follow. Most graduates take the path of fellowship or subspecialty training to gain further knowledge and skills in a more specialized segment of their chosen fields. Many graduates undertake this training in the hope that it will lead to greater career

opportunities, others do so under the impression that this is the norm and follow the flow. Regardless of motive, those undergoing fellowship training will find that they learn far more than just the theoretical knowledge and manual skills that their respective programs offer. Apart from the opportunities to travel and interact with people of different cultures, fellowship training also gives the fellow a chance to discover more about themselves, become self-sufficient, and undergo character development, along with the life lessons that the fellowship experience will provide.

JOSE CARLOS C. ESTIL, JR., MD, FPOA

Dr. Jose Carlos C. Estil, Jr. graduated from the University of the Philippines College of Medicine and took his residency at the Department of Orthopedics of UP-Philippine General Hospital.

He underwent further Orthopaedic trainings and finished his fellowships in Foot and Ankle Surgery at the Korea University Medical Center—Guro Hospital (Seoul, South Korea) and in Adult Joint Reconstruction at Singapore General Hospital. He is currently a consultant at the Perpetual Succor Hospital and Manila Doctors Hospital.

Lecture: Stress Fractures and Morton's Neuroma

Abstract: *Metatarsal stress fractures and Morton neuroma are two of the more common causes of forefoot pain. This is a brief review on basic knowledge and current concepts, with regards the pathology, presentation, and management of these two conditions.*

EDGAR MICHAEL T. EUFEMIO, MD, FPOA

Dr. Edgar Michael T. Eufemio is a graduate of the University of the Philippines (UP) College of Medicine and finished as Chief Resident of the UP-Philippine General Hospital (PGH) Department of Orthopedics. He completed his Fellowship in Sports Medicine at the University of Cincinnati and was the "godfather" during his Travelling Fellowship with the European Society of Sports Traumatology, Knee Surgery and Arthroscopy and Asia Pacific Orthopedic Association or ESSKA-APOA in 2008. He had additional training in Platelet-Rich Plasma at the Orthopaedic Arthroscopic Surgery International in Milan, Italy.

He was the founding Head of the UP-PGH Department of Orthopaedics Sports Clinic from 2000 to 2010. He is the past President of the Philippine Orthopedic Society for Sports Medicine from 2011 to 2014 and the past President of the ASEAN Society for Sports Medicine and Arthroscopy from 2014 to 2015.

He is a Consultant at the Cardinal Santos Medical Center, is the Head of the Ortho-Rehab-Rheuma Division of the MegaClinic and is the Medical Director of the Peak Form Sports Recovery Center,

He is the Philippine Medical Association's 2016 Awardee for Outstanding Contribution to Modern Medicine for his "Implant-less" ACL Reconstruction Technique and for developing "The Fitness Quotient"

Lecture: Practical Applications of PRP

MANOLITO M. FLAVIER, MD, FPOA

Dr. Manolito M. Flavier graduated from the University of Sto. Tomas, College of Medicine and Surgery and had his internship on the said institution. He had his Orthopedic residency at the Philippine Orthopedic Center and is currently a full time staff of the institution. He likewise is a visiting Consultant at the Medical City.

He had his fellowship in General Orthopedics and Joint Replacement at The Christ Hospital Cincinnati, Ohio under the mentorship of Dr. Edward V.A. Lim. He was the Country Representative for the AO Trauma Asia Pacific Research from 2008-2014. He is currently an officer of the Philippine Orthopedic Trauma Society, member of the Philippine Hip and Knee Society and AO Trauma Philippines. He is currently a member of the Board of the Philippine Board of Orthopedics.

Lecture: Femoral Neck Fractures in the Elderly: Fixation Still Works

Femoral neck fractures in the elderly is a major health issue. Evidence suggests that its' incidence will continue to increase in the coming decades. Most are due to low energy falls or falls from a standing height. This results in a hip fracture that impacts not only the mobility of the elderly but also increases their mortality rate.

Femoral neck fractures are more importantly, intracapsular fractures, where femoral head vitality is compromised with displacement. That is why displacement needs to be determined pre operatively in order to plan appropriate management. Radiographic images are most of the time sufficient to determine the diagnosis. The Garden Alignment Index and the Lowell's Line can be used as guides for reduction or alignment. But sometimes displacement is difficult to determine, which justifies the use of either a CT scan or MRI.

Multiple classifications exist for femoral neck fractures. The most widely used is the Garden classification. However, this classification has a poor interobserver variability. The binary Modified Garden classification divides the fracture into Undisplaced and Displaced fractures. This improves the inter observer agreement and influences management. The Modified Garden classification together with the CT scan images results in the highest agreement amongst surgeons.

According to a recent systematic review by Xu et al. shows that for an Undisplaced femoral neck fracture, Internal fixation has a higher union rate (92.6% vs 68.8%) with a lower Secondary displacement and reoperation rate compared with Conservative management. Internal fixation remains to be the recommended mangement for Undisplaced femoral neck fractures. But for Displaced femoral neck fractures, multiple reviews reveal that Arthroplasty has more benefits in terms of lower Revision rates and better function.

FACULTY

ROSALYN P. FLORES, MD, FPOA

Dr. Rosalyn Flores specializes in Pediatric Orthopaedics and had her fellowship training under the Division of Paediatric Orthopaedics, Department of Orthopaedic Surgery at the National University Hospital, Singapore. She also underwent a Pediatric Orthopaedic training program at the Nemours/Alfred I. DuPont Hospital for Children in Wilmington, Delaware, USA as an International Scholarship Recipient of the American Academy of Orthopaedic Surgeons.

She is a graduate of orthopaedic residency at the University of Santo Tomas Hospital, Manila where she was awarded as an outstanding resident by the Philippine Board of Orthopaedics during her 2nd to 4th year level of training. She is currently affiliated with the University of Santo Tomas Hospital, Rizal Medical Center, and Miraclefeet Philippines.

Lecture: Peculiarities of the Female Anatomy

Abstract: This lecture discusses the peculiarities of the female anatomy and how these can predispose females to develop certain musculoskeletal disorders. Some methods by which to mitigate these conditions will also be reviewed.

MARY JEANNE O. FLORDELIS, MD

Dr. Mary Jeanne O. Flordelis specializes in Internal Medicine with a subspecialty in Rehabilitation Medicine. She had his pre-med, doctor of medicine, residency and fellowship training at the University of Santo Tomas. She is a past president of the Philippine Society of Neuro Rehabilitation; member of the Philippine Academy of Rehabilitation Medicine, PMA and American Academy of Physical Medicine and Rehabilitation (AAPM and R).

She is an active consultant at the Chong Hua Medical Arts Rehab Medics and Perpetual Succour Hospital Advanced Rehab, Cebu City. Her interests include electro myograph, neuro rehabilitation, regenerative medicine / electrodiagnostic medicine, musculoskeletal rehabilitation and sports medicine.

Lecture: Role of Rehab in Degenerative Joint Management

AI E. GAMBOA, MD, FPOA

Dr. Ai Gamboa finished orthopedic residency training at the Institute of Orthopaedics and Sports Medicine, St. Luke's Medical Center She topped the Philippine Board Diplomate Exams in 2013. She had her Fellowship in Foot and Ankle Surgery at Newcastle Foot and Ankle Clinic, Newcastle, Australia andFellowship in Lower Limb Arthroscopy and Arthroplasty at Wakefield Orthopaedic Clinic, Adelaide, Australia.

She is an active consultant at the Institute of Orthopaedics & Sports Medicine, St. Luke's Medical Center Global and an affiliate consultant at the St. Luke's Medical Center, Quezon City.

Lectures: (1)Anatomy and Biomechanics; (2) Hallux Valgus

CZAR LOUIE L. GASTON, MD, FPOA

Dr. Czar Louie Gaston is a graduate of residency training at the UP-PGH Department of Orthopaedics. He trained in Musculoskeletal Oncology at Saint Vincent's Hospital, Melbourne, Australia and Orthopedic Oncology and Arthroplasty at the Royal Orthopaedic Hospital in Birmingham, UK. He also finished AO Basic/ Advanced Course here in Manila.

Lecture: Recognition of STS: Evaluation and Diagnostic Modalities

SAMUEL ARSENIO MUNOZ GROZMAN, MD, FPOA

Dr. Sam Grozman specializes in spine surgery where he trained in Spine Surgery at the Singapore General Hospital, Duchess of Kent Childrens Hospital and Queen Mary Hospital Hong Kong University. He also had an Intensive Course in Biomechanical Engineering EU-Asia Link Project Dela Salle University of Pisa.

He is a graduate in orthopedic residency at the UP-Philippine General Hospital and was Chief Resident 2004 & 2005. He is currently a part time Clinical Associate Professor at the UPCM – PGH and DLSUMC. He serves as a Consultant at the Asian Hospital and Medical Center and Department of Orthopedics, Ospital ng Muntinlupa. He was CME Coordinator and member of the organizer of the PSS 1st Live Tissue Course on complications in Spine Surgery since 2011. He is also an Associate Board Examiner Philippine Board of Orthopedics.

Lecture: Less is More: Minimally Invasive Solutions for Degenerative Lumbar Spondylosis

JOSE MANUEL F. IGNACIO, MD, FPOA

Dr. Jose Manuel Ignacio is a graduate of the University of the Philippines-Philippine General Hospital (UP-PGH) residency training program. He had his fellowships in Orthopaedic Surgery at the Department of Orthopaedics, National University of Singapore and at the Kenton D. Leatherman Spine Center, University of Louisville, Kentucky, USA.

Dr. Ignacio currently holds positions including: Associate Professor 3, College of Medicine, UP-PGH; Head, Spine Section and Member of the Musculoskeletal Infection Service , Department of Orthopedics, UP-PGH ; Co-Chair, Advanced Spine Care Service and Head of Orthopedic Spine, Institute of Orthopedics and Sports Medicine, St. Luke's Medical Center, Global City; Member of the Board and Head of Continuing Education, Philippine Spine Society; Council Member, Asia Pacific Orthopaedic Association, Spine Section (APSS); Member, AOSpine Online Education Task Force; He is a peer reviewer with the Govt of Hong Kong Special Administrative Region Food and Health Bureau; He is with the editorial board of The Asian Spine Journal and the Acta Orthopaedica et Traumatologica Turcica.

Lecture: Cement Augmentation in Osteoporotic Fractures and other Spinal Pathologies

FACULTY

RAPHAEL ANGELO C. JURILLA, MD, FPOA

Dr. Raphael Jurilla is currently a Consultant at the Philippine Orthopaedic Center-Orthopaedic Trauma, Sports Surgery, Hip, Knee, Foot & Ankle Surgery.

He finished his residency at the Philippine Orthopaedic Center and had his fellowship in Lower Extremity Joint Surgery and Sports Traumatology at the Atos Klinik Heidelberg, Germany Center for Hip, Knee, Ankle and Foot Surgery and Sports Traumatology. He also had his Sports Medicine and Arthroscopic Surgery at the Philippine General Hospital, Cardinal Santos Medical Center and Delos Santos Medical Center.

Lecture: Instability

JOVITO C. LAO, MD, FPOA, FPCS

Dr. Bubot Lao finished his residency training program at the Philippine Orthopedic Center. He is currently the Medical Chief of the Polymedic General Hospital in Cagayan De Oro City. He is also the current Chairman (Medical Specialist IV FT) of the Department of Orthopedics, Northern Mindanao Medical Center. Dr. Lao is a past president of the POA North Mindanao Chapter. He is also a sole proprietor of Well Bone Trading.

Lecture: Introduction of Genesis of Back Pain & Principles of PLDD

TAK-WING LAU, MBBS(HK), FRCSEd(Ortho), FHKAM(Ortho), FHKCOS

Dr. Tak Wing Lau is an Associate Consultant at the Department of Orthopaedics and Traumatology, Queen Mary Hospital; Deputy Chief of the Division of Trauma, Department of Orthopaedics and Traumatology; Clinical Champion of the Geriatric hip fracture critical clinical pathway, Queen Mary Hospital; and Instructor, Advance Trauma Life Support (ATLS), Queen Mary Hospital.

He is also Honorary Assistant Professor, Department of Orthopaedics and Traumatology, The University of Hong Kong. He has numerous publications in books, online resources and peer-reviewed journals. He is currently the Chairperson of AOTrauma Asia-Pacific HK Chapter and Trustee of AO Foundation.

Lectures:

Orthogeriatrics: Is this a Different Ballgame?

Abstract: Elderly population is in the increasing trend and the number of fragility fractures is therefore increasing. Nowadays, management of these fragility fractures, especially the lower limb ones, are mostly operative. Early mobilization and weight bearing can prevent complications like chest infection, urinary tract infection or pressure sore. However, comorbidities are also common in elderly. Therefore, pre-, intra- and post-operative management to minimize complications and mortalities is utmost important besides a well-performed fracture stabilization. Prompt and safe surgery within 48 hours after admission is the standard now. During the hospital stay, patients should be comanaged by surgeons and geriatricians. Besides them, an interdisciplinary approach involving anaesthetists, nurses, therapists and other allied health professional is the best care model for these high risk patients. After the surgeries, antiresorptive therapy and fall prevention should also follow a standard protocol.

Subtrochanteric Fractures: Should We Fear the Atypical Fracture?

Abstract: Atypical femur fracture refers to a kind of pathological stress fracture usually as a result of prolong use of bisphosphonates. The fracture commonly happens at the subtrochanteric or diaphyseal region. They have their own clinical and radiological characteristics. They are also difficult in reduction, fixation and healing. But if one can follow some guidelines, the chance of complication could be minimized. Regarding reduction, the fracture usually needs to be reduced by open means and the common error is varus reduction. Regarding the fixation, nail is usually the treatment of choice. The entry site needs to be slightly medial in order to prevent varus malreduction. The reaming is also difficult because the intramedullary cavity is usually narrow due to general cortical thickening. Fracture healing is also impaired because of bisphosphonates after-effect and medications promoting healing like teriperatide could be considered.

The Role of Cement Augmentation in Fracture Fixation

Abstract: Fracture fixation in osteoporotic bone is challenging. One of the common complications is screws cut out before the fracture heals. By increasing the surface area at the screw tip, the pressure will be decreased. The chance of cut out will be less. Cement augmentation is now a standard procedure to increase the surface area at the screw tip to improve fixation and lower the chance of fixation failure. The cement used can infiltrate into the porotic cancellous bone, providing a better anchorage after it hardens. This technique is commonly used in proximal humerus and also femoral head region. The cement is injected through the screw after a "leak" test. This confirms the cement will not go into the joint during injection. Heat generation during cement harden is not causing problems to fracture healing. Implant removal is also not difficult. However, significant improvement in clinical result is still lacking.

ANGELO R. LEAÑO, MD, FPOA

Dr. Angelo Leaño finished his orthopedic residency training at the Department of Orthopedics, UP-Philippine General Hospital and was chief resident in the year 2013. He had his fellowship in Bone and Cartilage Transplantation and Joint Revision Surgery with Queensland Hips & Knees at Brisbane Private Hospital in Queensland, Australia.

His current practice is based in Pasig and Mandaluyong where he is a consultant at The Medical City, VRP Medical Center, and Rizal Medical Center. He also holds clinics at the MegaClinic and the Secondwind Athletic Training Room, among others.

Lecture: Patellofemoral Pain Syndrome in the Female Population

JEAN PIERRE F. LEUNG, MD, FPOA

Dr. Jean Pierre F. Leung, a graduate of the University of the Philippines College of Medicine. He completed his fellowships in Pediatric Orthopedic and Spine at the Chinese University of Hong Kong and in Orthopedic Trauma and Joint Replacement at the University of Cincinnati (USA) after his Orthopedics residency at the UP-Philippine General Hospital Department of Orthopedics. He was also a Sofamor Danek Spine Fellow (Adelaide, South Australia).

An assistant professor at the St. Louis University School of Medicine, he is the chairman of the

Department of Orthopedics of the Notre Dame de Chartres Hospital in Baguio City and is likewise affiliated with the Benguet General Hospital. He is a past president of the Philippine Orthopaedic Association North Luzon Chapter and Past Chairman of the Philippine Board of Orthopedics. He is also part of the AO Trauma faculty.

Lecture: Fractures about the Knee: All can be Fixed!

Abstract: Fractures about the knee in geriatric patients present a difficult problem. Underlying diseases such as osteoporosis, knee osteroarthritis, and systemic comorbidities increase the difficulty and adversely affect outcomes for these conditions.

Proper surgical planning and technique, as well as advances in surgical technique (minimally invasive techniques) and implant technology (angle stable locked plates) have improved outcomes. The indications of fracture fixation of fracture fixation in geriatric patients have been extended to patients with periarticular fractures, osteoporosis, and even peri-implant fractures.

Nonetheless, underlying bone and patient conditions necessitate tempering of expected outcomes and management is best done in a multidisciplinary setting addressing patients medical, surgical, and rehabilitation needs

CANDICE ELAINE C. LIM, MD, FPOA

Dr. Candice Lim finished her medical degree in UERMMMC and had her Orthopedic residency training at The Medical City, where she was chief resident from 2009 to 2013. She had her fellowship training in Pediatric Orthopedics at the Seoul National University Children's Hospital, Seoul, South Korea and observership training in Pediatric Orthopedics at the New York University Hospital for Joint Diseases – Center for Children, New York City, USA. She also had her fellowship in AO Trauma at the Hospital for Special Surgery in New York City.

She is currently a consultant at The Medical City, where she is a member of the Residency Training Committee and of the section of Pediatric Orthopedics. She is also affiliated with Holy Life Hospital and Victor R. Potenciano Medical Center. She is also presently the secretary of the Pediatric Orthopedic Society of the Philippines.

Lecture: Female Pediatric Orthopedic Disorders

Abstract: Certain pediatric orthopedic conditions have been reported to occur more commonly in girls. These include adolescent idiopathic scoliosis, developmental dysplasia of the hip, increased femoral anteversion, and patellofemoral instability. Each condition will be discussed in relation to epidemiology and anatomic and physiologic factors that may lead to their preponderance for the female gender, as well as strategies for diagnosis and treatment.

KIRBY O. LIM, MD, FPOA

Dr. Kirby LIm is affiliated to Vicente Sotto Memorial Medical Center as member of the training staff, while he is a member of the medical staff of Saint Vincent General Hospital and Mendero Medical Center. He is also affiliated as visiting consultant of the following hospitals in Cebu City, Chong Hua Main, Chong Hua Cancer Center and Perpetual Soccur Hospital.

He completed his training in Orthopedics and Traumatology at Vicente Sotto Memotial Medical Center. He completed his Clinical and Research Fellowship in Orhtopaedic Foot and Ankle Surgery in Kore University Medical Center, Guro Hospital under Professor Hak Jun Kim. His interests include Foot and Ankle Surgery, Wound Care Management and Orthopaedic Trauma

Lecture: Lesser Toe and Bunionette

Abstract: Lesser toe deformities maybe static or dynamic. They may be associated with other deformities of the hallux, midfoot, or hindfoot or they can occur as isolated entities. Poor footwear with tight or narrow toe boxes are the most common factors related to the cause of these deformities and which may also be the related to the higher female preponderance. On the other hand, lesser toe deformities may also arise from heritable causes or can result from congenital or neuromuscular conditions.

Among the many lesser toe deformities this lecture will focus more on the common deformities which are the Claw Toe, Hammer Toe, Mallet toe and the Bunionette. Callosites, tenderness, metatarsalgia, difficulty in using shoe wear are among the most common complaints of these patients. Keratoses over the interphalangeal joints and under the head of the first metatarsal are commonly seen with these conditions. Conservative management is helpful in dealing with flexible deformities, however, tendon transfers (FDL) may be used if persistence of symptoms occur. Resection Arthroplasty or the Duvries Arthroplasty along with flexor tendon transfers are the preferred treatment for rigid deformities.

A Bunionette may also be treated conservatively by using a roomier, well fitted shoes. Shaving of the hypertrophic callous and padding of the prominent 5th metatarsal head can reduce symptoms. However if a painful plantar and lateral keratosis develops, surgical intervention may be needed. Surgical interventions range from simple condylectomy to distal metatarsal osteotomy which includes Chevron, Oblique, Transverse or Weil osteotomies. A mid shaft osteotomy may also be done in cases of type 2 bunionette, A proximal chevron osteotomy is used in some type III bunionette. A SERI osteotomy is also being utilized for bunionette correction. In a study by Gianini et al., they concluded that this minimally invasive procedure has been noted to be effective and reliable treatment for painful bunionette. It achieved more than 90% excellent and good results with reduced surgical time and complication.

JAMES LOH SIR-YOUNG, MD

Senior Consultant Orthopaedic Surgeon
Director of Hip and Knee Surgery, Changi General Hospital
Dr. James Loh is a senior consultant orthopaedic surgeon and the Director of Hip and Knee surgery in the Department of Orthopaedic Surgery, Changi General Hospital.

He graduated from the University of Singapore. He is a fellow in Surgery in general

as well as Orthopaedics at the Royal College of Surgeons in Edinburgh. He started his orthopaedic surgery training at the turn of the century. This included one year of training in Sweden and working at the world-renowned Karolinska University Hospital, Stockholm. There he defined his interest in hip and knee surgery.

His scope of practice encompasses treating the wide spectrum of sport injuries that affects the hip and knee region. These include hip and knee arthroscopy for sports injuries such as ligament reconstruction, fracture fixation, alignment correction surgery and joint replacement surgeries. His personal interest in complex knee surgery such as multiple ligament reconstruction is evident in his work.

He is a core faculty in the orthopaedic residency programme and was involved in setting up the training curriculum. He conducts hip and knee surgery training courses both locally and overseas, on a regular basis. He serves on the Singhealth committee for allograft use among other administrative duties.

His research interest involves mainly cadaveric work and understandably targeted at the hip and knee region. He holds a number of grant funded projects and had contributed to top international orthopaedic journals.

He runs regularly and is an advocate of a healthy and active lifestyle.

Lectures:
The Ageing Knee
The Old Problem of MLIK: What we can improve on

CLARITA C. MAAÑO, MD, MHPEd , FPDS

Dr. Clarita Cruz Maaño is an alumna of University of the Philippines,(UP) Medicine Class 1974, a Diplomate and Fellow of the Philippine Dermatological Society(PDS),Chairperson of the PRC Professional Development Council for Medicine.(CPDC) and Chair , PRC Board of Medicine,(PRBOM).

Dr. Cruz- Maaño she had been appointed to various administrative position in the University of the Philippines: Chair of the Section of Dermatology of the Department of Internal Medicine (1999-2010); Chair of the Medical Education Unit of the UP College of Medicine (1992-2000), Associate Dean for Academic Development of the UP College of Medicine (2000-2003), Director of UP Manila Alumni Affairs Office, and first Director of the UP Manila Alumni Relations and Placement Office.(2003-2005). Outside the University, she was elected President of the Philippine Dermatology Society(1997-1998) and one of the most reliable and dedicated accreditor of the Philippine Accrediting Association for Schools Colleges and Universities.(PAASCU).

Dr. Cruz- Maaño has been teaching at the UP College of Medicine and training medical students and residents at the Philippine General Hospital for 35 years, and one of its most active members in all aspects as: teacher-trainor, researcher, curriculum innovator, academic coordinator, student

mentor, hospital clinician and university administrator. To better prepare her for her life as medical educator, she completed her Masters in Health Professional Education (MHPEd) at the National Teachers Training Center (NTTC) of UP Manila in 1991.

Lecture: PRC Symposium

WILLIAM JOSEPH MALONEY III, MD

Elsbach-Richards Professor of Surgery
Professor and Chairman
Department of Orthopaedic Surgery
Stanford University School of Medicine

Dr. Maloney attended undergraduate school at Stanford University and received a medical degree from Columbia College of Physicians and Surgeons in New York City. He interned and then served as junior, senior and chief resident in orthopaedic surgery at Stanford Medical Center, and was a clinical fellow in hip reconstruction surgery at Massachusetts General Hospital in Boston. Prior to becoming Orthopaedic Chair at Stanford, Dr. Maloney served on the faculty of the Department of Orthopaedic Surgery at Washington University School of Medicine and as Chief of Orthopaedics at Barnes-Jewish Hospital in St. Louis, Mo.

Dr. Maloney is currently the President of the American Academy of Orthopaedic Surgeons and has served on numerous AAOS committees, including the Council on Education. Previously, he was chair of the American Joint Replacement Registry Board of Directors (AJRR), and on the board of directors for the Knee Society, the Hip Society, the Western Orthopaedic Association, and the American Association of Hip and Knee Surgeons (AAHKS). Dr. Maloney is a past president of the Hip Society.

Lectures:
DDH Surgery
The Stiff Knee
TKR for the Valgus Knee
Femoral Neck Fractures in the Elderly: THA
The Role of Stems in TKR in the Elderly

PAUL JULIUS A. MEDINA, MD, FPOA

Dr. Paul Julius Medina specializes in Spine Surgery. He finished his residency training on Orthopaedic Surgery and Traumatology at the Philippine Orthopaedic Center. He had his fellowship in Orthopaedic Spine Surgery at the Exeter Spinal Unit, Princess Elizabeth Orthopaedic Center - Royal Devon and Exeter Hospital, Exeter, United Kingdom and Section of Spine Surgery, Department of Orthopaedics, Tan Tock Seng Hospital, Singapore.

He is currently an orthopedic spine surgeon at Mercy Community Hospital, Adventist Medical Center, Dr. Uy Hospital, Inc., and Iligan Medical Center Hospital. He is a faculty of the Department of Surgery of the Mindanao State University – College of Medicine.

Lectures:

Decompression for Lumbar Stenosis: When is Fusion Indicated

Abstract: Low back pain due to lumbar stenosis is a relatively common clinical and surgical problem especially with a growing aging population. With multiple medical and scientific aspects to consider in indicating specific types (e.g. decompression vs decompression with fusion) of surgeries to these patients, the cost of management can also hardly be ignored. Indication for fusion should, indeed, should be clearly identified and be coupled with more conclusive evidence to increase the positive outcomes in surgeries.

Why I did Research?: A Hitchhiker's Guide to Research

Abstract: As most orthopaedic residents view research as an added burden during training and just as requirement for graduation, it is but a need to lighten up this scientific practice and show by real life example the practical logic on why a research is done, who are the people that will make research easier to do, when is the right time to do it, where is the perfect place to start, how a fruitful research paper is processed and what will it do to us as a person more than being a surgeon.

CHRISTOPHER S. MOW, MD (USA)

Dr. Christopher S. Mow is currently a Clinical Associate Professor and International Program Director at the department of Orthopaedic Surgery, Stanford University Medical Center, Stanford CA. He took his MD at the New York University School of Medicine (1982'1986); His BA at the Cornell University Asian Studies (1978-1982) i and HS at the Phillips Exeter Academy (1974-1978) Dr. Mow had his medical internship at the Lenox Hill Hospital, New York, NY (1986-1987) and pursued his orthopedic residency at the Hospital for Special Surgery, Cornell University Medical Center, New York, NY (1987-1991). He is also an 0rthopaedic Board Certification passer in Written (1991), 0ral (1994) & Recertification (2004). Dr Mow had his fellowship training as an Adult Reconstructive Fellow at the Department of Orthopaedics, University of Colorado Health Sciences Center, Denver Co (1991-1992). He presently holds honorary positions which include: Honorary Professor of Orthopaedic Surgery, Zhongshan Sun Yat-sen School of Medicine, Guangzhou, Peoples' Republic of China; Yang Ming Medical College, Taipei, Taiwan: Honorary Professor of orthopaedic Surgery; Honorary Professor of Orthopaedic Surgery, No.1 University Hospital, West China University of Medical Sciences, Chengdu, People's Republic of China; Honorary Professor of orthopaedic Surgery, Tianjin Hospital Tianjin, People's Republic of China, and Honorary Professor of Orthopaedic Surgery, Tianjin First Medical Center, Tianjin Second Medical University, Tianjin, Peoples' Republic of China.

He presently has the following editorial, committee and board positions: Faculty Review Board University of Malaya, Kuala Lumpur Malaysia; Honorary Founding Patron, Indonesia Hip and Knee Society, Jakarta, Indonesia; Chairman, Board of Directors, Liu Kong-le Foundation for Medical Education and Exchange, Hong Kong SAR, China; Consultant Reviewer, Clinical Orthopaedics and Related Research Committee Member, Research and Grant Board, American Association of Hip and Knee Surgeons; Board of Directors Asian American Institute for Research and Education Pittsburgh, PA (President Savio L. Y. Woo, PhD); Committee Member, Evaluation and Examina¬tion Committee, American Academy of Orthopaedic Surgeons [AAOS); Board of Directors, Chinese Speaking 0rthopaedic So¬ciety, Hong Kong, China; Committee Member, Hip, Knee, and Adult Reconstruction,

American Academy of Orthopaedic Surgeons (AAOS); and Board of Directors, Lau Foundation for Chi¬nese Medical and Cultural Education, Taipei, Taiwan, Republic of China.

Lectures:

Regional Pain Management Techniques for TKR in 2017: Which is best?

Christopher S. Mow MD

Associate Chief of Staff , Clinical Professor, Deputy Chief, Dept. of Orthopaedic Surgery, Stanford University Medical Center

Xiang Qian MD

Assistant Professor, Department of Anesthesia and Pain Management, Stanford University Medical Center

Chin Tat Lim MD

Assistant Professor, Dept. of Orthopaedic Surgery, National University of Singapore

Abstract: The area of pain management after total knee replacement as changed dramatically over the past decade. What was once one of the most painful surgical procedures of any kind has now be become highly manageable, allowing much faster mobilization and overall greatly improved outcomes and patient satisfaction. Regional anesthesia after TKA is now considered an essential component of the care continuum and is routine in all cases at our institution, starting with spinal anesthesia where possible. Adductor Canal Block is also commonly utilized, as it reliably does not compromise motor function while giving excellent pain relief. In order to achieve proper placement of the catheter, ultrasonic guidance is utilized, and the catheter remains in place for the duration of hospitalization, which is typically no more than 2 days. Thorough infiltration of all tissues at the end of the case with long acting anesthetic in the operative field is also essential. With proper regional and local anesthetic techniques, narcotic usage can be minimized, if not eliminated altogether, thus avoiding many narcotic related complications, such as acute kidney injury, pulmonary complications, delirium, constipation, etc. At this time, regional anesthesia is an indispensable part of the care of the TKA patient, and a good team approach with the anesthetic department is essential.

Outpatient Arthroplasty – The New Trend?

Christopher S. Mow MD

Associate Chief of Staff , Clinical Professor, Deputy Chief, Dept. of Orthopaedic Surgery

Stanford University Medical Center

Chin Tat Lim

Assistant Professor, Dept. of Orthopaedic Surgery, National University of Singapore

Abstract: Total knee arthroplasty (TKA) and total hip arthroplasty (THA) are among the most successful orthopedic procedures with 15 year-survival rate of greater than 90% in most studies. THA and TKA have traditionally been considered inpatient surgical procedures. However, length of stay (LOS) has slowly decreased over the past few decades mirroring trends for many other procedures. The decreased LOS has been made possible by multiple improvements including surgical techniques, anesthesia, postoperative pain management techniques, implementation of clinical pathways, a better understanding of the increased awareness of complications associated with decreased mobility, increased focus on cost reduction. Recent published studies demonstrate no compromise in outcome with early full weightbearing in properly selected patients in both THA and TKA. Advantages of outpatient arthroplasty includes

decreased LOS, reduced cost, possibility reduced complications and higher patient satisfaction. There are an increasing number of publications evaluating outcomes of outpatient arthroplasty. Rigorous patient selection criteria, extensive preoperative patient education and rapid postoperative rehabilitation are keys to ensuring positive outcomes in outpatient arthroplasty. Peri-operative care with emphasis on prevention and prompt treatment of pain and medical conditions with early physical therapy are essential to ensure patient early discharge.

Acetabular Fractures for THA

Total Hip Arthroplasty After Acetabular Fractures

Christopher S. Mow MD
Associate Chief of Staff , Clinical Professor, Deputy Chief, Dept. of Orthopaedic Surgery, Stanford University Medical Center
Chin Tat Lim
Assistant Professor, Dept. of Orthopaedic Surgery, National University of Singapore

Abstract: THR is not usually performed in the setting of acute acetabular fractures, although there are select circumstances which it may be considered. Indications for the acute arthroplasty included intra-articular comminution as well as full-thickness abrasive loss of the articular cartilage, impaction of the femoral head, and impaction of the acetabulum that involved >40% of the joint surface and included the weight-bearing region. Fractures with significant comminution or impaction of the articular surface of > 40%, associated full thickness cartilage loss of the acetabular or femoral surface, and Pipkin type fractures where a large portion of the femoral head has been fractured, and acetabular fractures in the elderly may be considered for THR. THR in the setting of acute acetabular fracture is technically difficult, as stable implant fixation must be achieved as well as fracture fixation. In the case of total hip replacement for an acute acetabular fracture, the femoral head and neck are available for structural or morselized grafting, and absolute anatomic reduction is no longer necessary. The results of Mears and Velyvis suggest the outcome of THR for acute acetabular fractures is acceptable in medium term follow up.

Total hip arthroplasty after acetabular fracture is usually indicated for the treatment of severe posttraumatic arthrosis, avascular necrosis of the femoral head, or both. Primary total hip arthroplasty in the setting of previous acetabular fracture is recognized as being more technically more complex than typical primary THR, due to soft tissue scarring, contractures, and heterotopic ossification from previous trauma or surgery, retained hardware, and acetabular bone loss or distortion. Thorough radiographic evaluation is essential, with a minimum of multiple pelvis views. CT scanning can also be of substantial benefit in assessing available bone stock and locating retained hardware. THR after acetabular fracture has been historically associated with higher rates of aseptic loosening with patients more often being younger and male gender, although more recent reports have shown improved results using noncemented acetabular components, with poorer results noted in patients who have marked acetabular bone loss. The surgeon should have available multi hole acetabular components with a variety of screw lengths, and strictly adhere to standard principles of safe screw placement. THR in the setting of previous acetabular fracture can be expected to be a longer surgery with higher blood loss than with typical primary THR.

Perioperative Medical Management of the Orthopaedic Total Joint Patient

Christopher S. Mow MD
Associate Chief of Staff , Clinical Professor, Deputy Chief, Dept. of Orthopaedic Surgery, Stanford University Medical Center

Chin Tat Lim
Assistant Professor, Dept. of Orthopaedic Surgery, National University of Singapore

Kate Luenprakansit
Clinical Assistant Professor, Dept. of Internal Medicine, Stanford University Medical Center

Abstract: Total Joint Arthroplasty of the hip and knee is increasingly being performed on more elderly patients with more medical comorbidities. The orthopaedic arthroplasty surgeon is seeing more and more elderly patients who wish to maintain an active lifestyle and who need to be treated for debilitating pain from end stage osteoarthritis of the hip and knee. Therefore there has been much greater emphasis on thorough preoperative internal medical and anesthesia evaluation as well as in hospital co-management with internal medicine for these patients. The goals of the pre-operative evaluation should be to identify undiagnosed co-morbidities and/or risk factors to minimize the complications of surgery, assess the level of risk for the patient given the co-morbidities and work-up, manage, and optimize the co-morbidities prior to surgery. Goal of the immediate post-operative period should be to minimize complications of the known medical co-morbidities and minimize the onset of acute medical complications and new onset conditions. Outcome improvements associated with internatl medicine co-Management of orthopaedic total joint patients include demonstrated decrease in length of stay, decreased costs and complication rates, and improved patient outcomes along with staff and patient satisfaction.

JEREMY JAMES C. MUNJI, MD, FPOA

Dr. Jeremy "Jem" Munji finished Orthopedic residency at the University of Santo Tomas Hospital where he was chief resident in 2014. He was awarded Outstanding Resident by the Philippine Board of Orthopaedics in 2013 during his 3rd year of training. He was also the past president of the Organization of Residents Training in Orthopaedics in 2013-2014.

After residency, he had his fellowship on shoulder replacement and arthroscopic shoulder reconstruction with Laurent Lafosse at Alps Surgery Institute, Clinique Générale Annecy, France and is a current member of the Philippine Shoulder Society.

He is currently a Visiting Consultant and member of the Residency Training Committee at the University of Santo Tomas Hospital

Lecture: Biceps Tendon Pathologies - Ignore, Tenotomize or Tenodesis

NATHANIEL S. ORILLAZA, JR., MD, FPOA

Dr. Nats Orillaza is a hand surgeon and Clinical Associate Professor at the University of the Philippines and a MS in Clinical Epidemiology candidate in the same institution.

He finished residency in Orthopedics at the UP-PGH and continued his training with a research fellowship in Hand and Upper Extremity Surgery under Professor John Capo in NJ, USA and clinical fellowship in Hand surgery under Professor Michael Tonkin in Sydney, Australia.

He has several international publications and reviews for national and international journals.

He is a trustee of the Philippine Board of Orthopedics, a member and faculty of AO Trauma, and an international member of the American Society for Surgery of the Hand, American Academy of Orthopedic Surgeons and SICOT.

Lecture: The Management of Different Arthritidis of the Hand

NEILSON G. PALABRICA, MD, FPOA

Dr. Jong Palabrica was the training officer for residency training and presently an orthopedic spine and oncology Senior Consultant at the Northern Mindanao Medical Center. He is also a member of the Philippine Board of Orthopaedics. He is also a Medical Faculty of the Dr. Jose P. Rizal School of Medicine, Xavier University, Cagayan De Oro City.

Dr. Palabrica is a graduate of the Philippine Orthopedic Center orthopedic residency program and trained in Musculoskeletal Tumor Surgery at POC. He also had his fellowship in Spine Surgery at the Meijo Hospital, Nagoya, Japan and Spine Tumor Surgery – Total en bloc Spondylectomy in Kanazawa University, Japan. His interests include limb salvage surgery, spine deformity surgery and spine tumor surgery.

Facilitator: Percutaneous Laser Disc Decompression

RONALD B. PIDLAOAN, MD, FPOA

An Orthopedic-Spine surgeon with more than 12 years of experience. Dr. Pidlaoan holds certification from the Philippine Board of Orthopedics. Additionally, he belongs to several Professional organizations including the Philippine Orthopedic Association, Philippine Spine Society, and the AO Spine Asia-Pacific.

Dr. Pidlaoan is an Associate Professor I for clinical clerks at St. Luke's College of Medicine, where he also finished his medical degree (pioneer batch).

Dr. Pidlaoan had his Orthopedic Residency training at St. Luke's Medical Center. He had his Post-graduate training in Sports Medicine at the University of Utah, USA, and his Spine Surgery Fellowship at National University Hospital in Singapore. He was also a recipient of the Depuy Spine Travelling Fellowship of the APOA.

Dr. Pidlaoan is actively serving at St. Luke's Medical Center in Bonifacio Global City and Quezon City.

Lecture: The Degenerative Cascade of Kirkaldy-Willis Revisited

Abstract: *Kikaldy-Willis name has become synonymous with the "degenerative cascade." His many publications on pathology and pathogenesis of lumbar spondylosis and stenosis, instability of the lumbar spine, causes of failure of spine surgery, and lateral spinal nerve entrapment have all become classics in the field of spine care. His works have served to develop the pathophysiologic basis for the understanding*

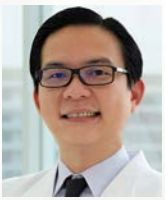
of clinical spine disease.

He conceptualized the "Degenerative Cascade" which was described in book "Managing Low Back Pain" published in 1983 by Churchill Livingstone. Kirkaldy-Willis' original work remains the single most brilliant correlation of pathophysiologic observations.

Kirkaldy-Willis and Farfan first proposed that in early or mild disc degeneration, the spinal motion segment (SMS) becomes less stable before further degenerative changes stabilize the segment with disease progression. However, there are aspects of this hypothesis, which remain controversial.

Numerous studies have focused on issues surrounding disc degeneration and pain. Fenty et al elaborate on the novel imaging modalities that have been developed to assess the disk in a more sensitive manner rather than traditional. Samartzis et al have provided an article that for the first time provides an extensive discussion as to how body fat can lead to the development of disc degeneration and low back pain. Ito and Creemers, Lotz et al< Hiyama et al, and Wuertz and Haglund address distinct mechanisms that play a role as pain generators of the disc and endplate. Mwale as well as Erwin report on the novel therapeutic technologies that can lead to regeneration or progression-modification of the degenerated and/or act as analgesics in the setting of discogenic back pain. Purmessur et al had the systematic review of the literature addressing candidates located in or derived from the notochord or notochordal cells and their efficacy in discogenic back pain.
With these innovations and changes in the diagnosis and treatment of spine problems, we are all fortunate to have had Kirkaldy-Willis as one of the "starters" at the gate of spine care. His legacy remains a continuing responsibility for all of us in the spine community.

JOHN HUBERT C. PUA, PTRP, MD, FPOA



Dr. Pua obtained his medical degree from the Faculty of Medicine and Surgery of the University of Santo Tomas and graduated magna cum laude. He then took his residency training under the Department of Orthopaedics of the University of Santo Tomas Hospital. Because of his exemplary performance during residency, he was given the Most Outstanding Resident Award by the Philippine Board of Orthopaedics for consistently ranking first place in the annual residents' In-Training Examinations. He was given the Medical Subspecialty Scholarship Grant by the Tan Yan Kee Foundation after residency and subsequently took his fellowship training for Hand and Microsurgery at the Prince of Wales Hospital of the Chinese University of Hong Kong. Dr. Pua also serves as the Secretary of the Association of Hand Surgeons of the Philippines and is the Residency Training Officer of the Department of Orthopaedics of the University of Santo Tomas Hospital. In the academe, he is a faculty staff of the Faculty of Medicine and Surgery and College of Rehabilitation Sciences of the University of Santo Tomas. Presently, he is part of the consultant staff of the University of Santo Tomas Hospital, Asian Hospital & Medical Center, De Los Santos Medical Center and Jose R. Reyes Memorial Medical Center.

Lecture: Post-traumatic Arthritis of the Wrist
Post-traumatic arthritis (PTA) develops following a fracture or ligament injury around the wrist joint. This takes time to manifest and the end result leads to a painful wrist with decreased function and disability of the upper extremity. A variety of molecular, mechanobiological and cellular events involved

in the pathogenesis and the progression of PTA have been identified. This type of arthritis shows a predictable and standardized progression, making its treatment stage dependent. Scapholunate advanced collapse (SLAC) is the most common cause of post-traumatic arthritis involving the wrist. Clinical and radiological examination are important in the diagnosis of the SLAC wrist. Another condition that can cause PTA of the wrist is scaphoid non-union advanced collapse (SNAC). The pattern of arthritic changes that develop in SNAC wrists is very similar to that seen in SLAC wrists. The two conditions are different derangements but have the same pathophysiology. When conservative management becomes ineffective, surgical options include complete or partial arthrodesis, denervation, proximal row carpectomy and radial styloidectomy. The choice of surgical procedure for SLAC and SNAC wrists depends on multiple factors including personal surgical preference and present stage of arthritic progression.

JONATHAN C. RONQUILLO, MD, FPOA

Dr. Jonathan C. Ronquillo is a graduate of De La Salle University - College of Medicine in 1996. He completed his orthopedic residency training in the same institution as chief resident in March 2003, and passed his diplomate examinations in the same year. He fulfilled his subspecialty training as surgical fellow under the Shoulder and Sports
Services at St. George Hospital in Sydney, Australia, and was a staff member of the orthopaedic department in Logan Hospital, Brisbane, Australia from 2004-2010.

He has authored and co-authored published materials on the shoulder in peer reviewed journals, and has presented his works in international and local conventions. He has distinct interest in research, in particular, those that can benefit people in the marginalized sector.

Currently, he is the training officer in the department of orthopedics at De La Salle University- Medical Center and is an assistant professor at the DLSU-College of Medicine. He is also a student examiner/ research paper reviewer for the University of New South Wales, Australia through the Orthopedic Research Institute of St. George Hospital in Sydney, Australia since 2012.

Dr. Ronquillo is a fellow of the Philippine Orthopaedic Association, Philippine Shoulder Society, the Philippine Orthopaedic Society for Sports Medicine, the ASEAN Society for Sports Medicine and Arthroscopy, and the vice president & fellow of the Philippine Orthopaedic Wound and Diabetic Limb Society. He practices at the De La Salle University Medical Center and the Asian Hospital and Medical Center.

Lecture: Reverse Total Shoulder Arthroplasty

JOSE ANTONIO G. SAN JUAN, MD, FPOA

Dr. San Juan graduated from the University of the Philippines College of Medicine in 1994 and completed his Orthopaedic Residency Training at the UP-PGH Department of Orthopaedics in 1998 and served as Chief Resident in 1999. He completed his Fellowship training in Joint Reconstruction and Arthroscopic Surgery at Flinders Medical Centre-Repatriation General Hospital in Adelaide, South Australia in 2000 and at the University of Cincinnati Medical Center, Cincinnati, Ohio, USA in 2001. His main areas of interest are: Adult Hip and Knee

Reconstruction Surgery, primary and revision Hip and Knee Replacement, primary and revision ACL Reconstruction, Arthroscopic Surgery of the Knee, Pelvis and Acetabular Fracture Management, Multimodal Analgesia in Orthopaedics and Osteoporosis. Dr. San Juan has published numerous articles in peer-reviewed journals, presented posters in local and international conventions, authored 2 book chapters and has given over 50 plenary lectures/presentations and conducted instructional courses locally and internationally in his different fields of interest. He is a Fellow of the Philippine Orthopaedic Association, past President of the Philippine Hip and Knee Society, Vice President of the Philippine Orthopaedic Society for Sports Medicine, Fellow of the Philippine Orthopaedic Trauma Society and is an International Affiliate Member of the American Academy of Orthopaedic Surgeons. He is a He serves as Council Member of the ASEAN Arthroplasty Association (AAA) and ASEAN Society for Sports Medicine and Arthroscopy (ASSA). He also serves as a Principal Reviewer for American Journal of Sports Medicine, Editorial Board of Orthopaedic Journal of Sports Medicine and Principal Reviewer for Journal of Orthopaedic Surgery.

He is currently Chairman, Dept of Orthopaedics, Chong Hua Hospital Program Director, Adult Reconstruction Fellowship, Chong Hua Hospital.

Lectures:
Neuropathic Pain in Geriatric Orthopaedic Patients
Shaping the Future of Wound Closure in Orthopedic Surgeries

JASON PAUL P. SANTIAGO, MD, FPOA

Dr. Jason Santiago had his fellowship in Orthopedic Sports Medicine, Shoulder and Knee Arthroscopic Surgery at the Singapore General Hospital and Minimally Invasive Total Hip & Knee Arthroplasty Surgery at the Welton Bone and Joint Hospital, Seoul, South Korea. He finished his orthopedic residency at the Philippine Orthopedic Center. He is currently a Consultant at the Adult and Children Orthopedic Service, Philippine orthopedic Center.

Lecture: Treatment Options in Rotator Cuff Tears - Partial Tears to Irreparable

SURESHAN SIVANANTHAN, MD, FRCS

Dr. Sureshan Sivananthan was a visiting Assistant Professor of Orthopaedic Surgery (Fellowship trained in Total Joint Arthroplasty) – Stanford University Medical Center, Palo Alto, California from 2011 – 2013. He is currently in private practice and is a visiting Professor at UMMC in Malaysia. He is currently the Honorary Treasurer of the Asia Pacific Orthopaedic Association.

Dr. Suresh finished his Masters Degree in MS Orth at the University of Malaya Medical Center and moved forth taking his residency in orthopedic surgery at the University of London, London, Deanery, UK. He received a lot of awards and certifications and had 7 Patents and Trademarks accomplished.

Lectures: (1)Arthroplasty in the Old: To Cement or Not to Cement (2) Role of Bisphosphonates after Total Joints & Fracture Fixation

FACULTY

IREWIN A. TABU, MD, FPOA

Dr. Irewin Tabu graduated from the University of the Philippines College of Medicine and subsequently finished his orthopedic residency training at the UP-Philippine General Hospital. He pursued further fellowship training in Hip and Knee Joint Revision Surgery at the Brisbane Private Hospital and Queensland Bone Bank, Australia; Hip and Knee Arthroplasty at St. Vincent's Hospital, Sydney Australia; and Pelvis and Acetabulum Reconstruction at the Department of Orthopedic Surgery, University of Bern, Switzerland.

He is currently a Consultant and Clinical Associate Professor at UP-PGH Dept. of Orthopedics, Section of Trauma and Arthroplasty Service. He is also the Head of the INORMUS-Philippines (International Orthopaedic Multicentre Study in Fracture Care); Lead Coordinator of the PGH Fracture Liaison Service and Ortho-geriatric Multidisciplinary Team; as well as an active member of the AO Trauma Philippines.

Lecture: Anterior Surgical Approaches to the Acetabulum: Modified Stoppa vs. Ilioinguinal Approach

Abstract: In the treatment of fractures of the acetabulum, it is generally accepted that the quality of reduction affects the outcome. Thus, adequate and proper exposure of the fractured region of the acetabulum is of paramount importance. For fractures involving the anterior column of the acetabulum , Judet, Judet and Letournel introduced the ilioinguinal approach in the 1960's and has been considered as the treatment standard for surgical reduction and fixation of these types of fractures of the acetabulum.

The growing number of fragility fractures due to lateral falls, as well as high energy motorcycle accidents causing lateral compression fractures resulting to medially displaced quadrilateral plate and superomedial dome fractures, has made management of anterior column fractures more challenging. This led to the development of intrapelvic approaches to the acetabulum. In the early 1990's, Hirvensalo et al and Cole and Bolhofner described an anterior intrapelvic and extraperitoneal approach to the anterior pelvis and acetabulum, the Modified Stoppa approach. This approach allows the surgeon to have a direct access to the pubic bones, the posterior surface of the ramus, the quadrilateral plate, the pubic eminence, and the infrapectineal surface, as well as the sciatic buttress, sciatic notch, up to the anterior sacroiliac joint. Based on studies, this approach affords improved mechanical advantage in the reduction and fixation of medially displaced fractures, as well as less surgical trauma due to the avoidance of the so-called middle window of the ilioinguinal approach.

OSCAR V.A. TAGULINAO, MD, FPCS

Dr. Oscar Victor A. Tagulinao is an active staff of Santo Tomas University Hospital, Cardinal Santos Medical Center, Hospital of the Infant Jesus and Chinese General Hospital & Med. Center. In the academe he is an Associate Professor 3 at the Department of Surgery, Department of Bioethics, Faculty of Medicine & Surgery at the University of Santo Tomas and Professor 1 at the Department of Medical Ethics & Humanities St. Luke's College of Medicine.

Dr. Tagulinao had his B.S.Pre-Med in Psychology and Doctor of Medicine (Cum Laude - Meritissimus) at the University of Santo Tomas. He had his residency in general surgery at Clark Air Force Base

Hospital, UP-PGH and University of Rochester (general and plastic surgery). He had his fellowship in Breast Surgical Oncology and Head & Neck Surgical Oncology at Roswell Park Memorial Hosp., Buffalo, NY, USA. He is also board certified by the Federal Licensing Examination (USA) and Philippine Board of Plastic Surgery.

He was past Chairman of the Phil. Board of Plastic Surgery; Past President of the Phil. Society of Aesthetic Plastic Surgery and Phil. Assoc. of Plastic, Reconstructive & Aesthetic Surgeons and past Governor of the Philippine College of Surgeons among others.
He is a Fellow of the Fellow Phil. Assoc. of Plastic, Reconstructive & Aesthetic Surgeons (PAPRAS), Phil. College of Surgeons (PCS), Phil. Society of Burn Injuries, Robert McCormack Plastic Surgery Society (USA) and Phil. Medical Association. He is also a Director of the UST Medical Alumni Association for 3 terms. Dr. Tagulinao is a member of the Catholic Physicians' Guild of the Philippines, Association of Philippine Medical Colleges and Quezon City Medical Society.

Lecture: Ethics

MARIA LILYBETH R. TANCHOCO, MD, FPSA, DPBPM, MBAH

"The only way to do great work is to love the work that you do and offer it to God," Dr. Ma. Lilybeth R. Tanchoco said as she described her guiding principle as a physician, educator and administrator.

Dr. Tanchoco's vast experience as a physician and educator and involvement in key organizations paved the way for her appointment as the 15th Dean of the College of Medicine of Manila Central University (MCU) in June 2015.

She served as the Chairperson of the MCU Filemon D. Tanchoco Medical Foundation (FDTMF) Hospital Department of Physiology from 2002 up to 2003 and later appointed as the Chairperson of the Department of Anesthesiology from 2004 up to 2012.

Dr. Tanchoco led the Pain Management and Chemotherapy Section of the MCU Hospital in 2012 until 2014. She is also head of the Institutional Review Board and holds vital positions in the College of Medicine's various standing committees.

She is currently the president of the Pain Society of the Philippines and a board examiner of the Philippine Board of Pain Medicine.

Dr. Tanchoco finished a Doctor of Medicine degree at the MCU College of Medicine in 1987. She completed her Residency Training at the MCU FDTMF Hospital Department of Anesthesiology in 1992 and Fellowship in Pain Medicine at the University of the Philippines–Philippine General Hospital in 1994.

She finished a Masters in Business Administration in Health degree at the Ateneo Graduate School of Business in 2015.

Lecture: Pain in the Elderly

Abstract: Pain is one of the symptoms most frequently encountered in elderly patients. The management of pain in the elderly in general has been associated with undertreatment. The geriatric population poses a particular clinical challenge due to age-related pharmacokinetic and pharmacodynamic issues, comorbid conditions, and polypharmacy, as well as frailty and cognitive decline. Elderly patients in general exhibit a higher incidence of chronic and neuropathic pain conditions. Poor control of pain has consistently been identified as an issue for older people. In the geriatric population, the assessment of pain requires measurement of pain intensity, delineation of opioid responsiveness, and clarification of the impact of pain on patients' psychological, social, spiritual and existential domains. The identification of safe and efficacious treatments for chronic pain remains a critical public health concern, especially considering the progressive increase of the world's elderly population.

ANTONIO N. TANCHULING, MD, FPOA

Dr. Antonio N. Tanchuling, Jr. is a founding member of the ASEAN Arthroplasty Association. He graduated from Cebu Doctors' School of Medicine and took his residency in National Orthopedic Hospital's Traumatology and Orthopedics. His post-residency training was as an AO Trauma Fellow at Singapore General Hospital and at the Center for Traumatology in Strasburg, France. He also took fellowship trainings in Osteoporosis and Bone Metabolic Disease at the Edward Harriot Hospital (France) and in Adult Reconstruction and Total Joint Replacement at the Minneapolis Orthopedic and Arthritis Institute-University of Minnesota, and at the Orthopaedic Biomechanics Laboratory, also in Minneapolis (USA).

He is currently affiliated with St. Luke's Medical Center as chairman of its Institute of Orthopedics and Sports Medicine (QC); as head of the Center for Joint Replacement Surgery (QC and BGC); and as consultant for Orthopedics at its Geriatric Center (QC).

He is a past trustee and chairman of the Philippine Board of Orthopedics. A fellow of the Philippine Orthopaedic Association and past president of the Philippine Hip & Knee Society, he is likewise a member of the International Affiliate, American Academy of Orthopedic Surgeons and SICOT.

He has presented papers in national and international Orthopaedic meetings on various topics including his areas of interests (Osteoporosis, Total Joint Replacement, and Geriatric Hip Fractures).

Lecture: Peritrochanteric Fractures in the Elderly: Hip Replacement Works Better

Abstract: *The incidence of hip fracture worldwide is 1:10,000 (Cooper, 2010). In the Philippines, Bonifacio, Canete and De la Rosa reported in 2006 that the incidence of hip fractures is 6/10,000. This is the highest in the Asian region so far. Peritrochanteric fractures quadrupled in number in the past years due to the increase in the number of the elderly among the different countries in Asia including the Philippines. The decline in birth rate in the Asian region explains the progressive increase of the elderly population with the associated fragility fractures seen in this select age group.*

Intertrochanteric fractures, in general, are managed with the surgical option of internal fixation, either with hip pinning or sliding screw. This is the method of choice regardless of age and fracture classification. The problem in the elderly population is their poor bone stock (osteoporosis) over the fractured area of the proximal femur. Internal fixation is technically difficult to perform in these cases. There is also a high rate

of failure in this age group, hence the high rate of revision surgery, either repeat fixation which could pose a greater problem or conversion to a hip replacement either partial or total hip replacement.

Hip replacement is considered as a viable option for the management of peritrochanteric fractures in the elderly. These cases involve elderly individuals with poor bone quality, but who are active community ambulators. They are medically stable to undergo surgery.

Literature review showed good results that include among others, hemiarthroplasty (bipolar) and total hip replacement surgery. It showed early ambulation and return to preoperative functional status. Furthermore, this showed also that this is a technically demanding procedure associated with more surgical dissection, longer operative time and higher intraoperative blood loss compared to the conventional internal fixation method. However, in the hands of skilled surgeons (Joint replacement surgeons), this could spell a difference. They have faster operative time, lesser blood loss and better soft tissue dissection. This is a surgeon-dependent factor which is an important variable to be considered in the success of this procedure.

We are also presenting our own series of Unstable Intertrochanteric Fractures (Evans II) in patients more than 70 years old who are moderately active and medically stable patients who underwent either Hemiarthroplasty (Unipolar and Bipolar) and Total Hip Replacement surgeries. This is a retrospective and descriptive type of study with a minimum follow up of 48 months. The results showed that most of them are able to ambulate with the use of an assistive device in a minimum period of 5 days. Pain is also evaluated and most of the patients have improved pain score after hip replacement.

In summary, hip replacement remains an option in the management of the unstable intertrochanteric fractures in the elderly. It may serve as a better choice in this select group of patients.

EDWARD H.M. WANG, MD MSc

Professor of Orthopedics, Univ of the Phil-Phil Gen Hospital
Author of Book "Bone Tumors in Filipinos"
International Advisory Board, Asia-Pacific Musculoskeletal Tumor Society
J of Ortho Surgery – Editorial Board and J Malaysian Ortho Assn – Manuscript Editor

Lecture: Principles of STS Surgery

FACULTY

YEO SENG JIN, MD, MBBS, FRCS (Edin), FAMS

Dr. Yeo is at present Senior Consultant and Director of Adult Reconstruction in the Department of Orthopaedic Surgery at Singapore General Hospital.

His academic position is Associate Professor at the Duke-NUS Graduate Medical School.
His interests is in Knee and Hip replacement surgery and he has published over 100 peer review articles on the subject.

Lecture:
Kinematic Alignment in TKR
Fractures about the Knee: Replacement works best
Revision TKR: tricks of the trade

JULIE LI YU, MD

- Associate Professor – Univ of Santo Tomas Faculty of Medicine and Surgery
- Masters of Science in Public Health – UP College of Public Health
- 2014 Philippine College of Physicians (PCP) Exemplar in Clinical Research
- International Society for Clinical Densitometry (ISCD) Certified Clinical Densitometrist

Administrative Positions:

- Chief – Section of Rheumatology – Chinese General Hospital & Med Center
- Head – Joint and Bone Center – UST Hospital
- Director – Dep't of Medical Education and Research – CGHMC
- Research Coordinator – Dep't of Medical Education and Research – UST Hospital
- President – Osteoporosis Society of the Philippines Foundation, Inc. (OSPFI)
- Vice-President – Philippine Rheumatology Association (PRA)
- Lecture: Bone Densitometry Service: Enhancing Practice

POA 68th Annual Congress

RESEARCH ABSTRACTS

RESIDENTS' RESEARCH FORUM PAPER ABSTRACTS (12)

Nov. 15, 2017
Palawan 1

1 Post -Operative DASH Scores of Surgically Treated Distal Radius Fractures in Relation to La Fontaine's Criteria of Instability

Fidelis Marie V. Corpus-Zuñiga
Institute of Orthopedics & Sports Medicine, St. Luke's Medical Center

This is a retrospective and prospective cohort study that aims to determine the functional outcome of adult patients who have distal radius fractures across all the available treatment options and correlate the instability criteria of La Fontaine with DASH scores and pain scores of the patients after treatment. Another objective is to correlate which factors are related with good or poor functional outcomes. Our results show that the presence of each La fontaine criterion shows a significantly higher DASH score, the highest among which is the presence of dorsal comminution. While the presence of age >60 years old on injury does not necessary result in a poor outcome.

2. Post-Operative Single-Shot Epidural Fentanyl and Bupivacaine for Postoperative Analgesia after Lumbar Decompression: A Prospective, Double-Blind Randomized Study

Manuel Feliciano B. Alican, Miguel Rafael D. Ramos
Institute of Orthopedics & Sports Medicine, St. Luke's Medical Center

Background: Despite the success of lumbar decompression in alleviating symptoms of sciatica, radiculopathy, and neurogenic claudication, transient back and buttock pain is still a common complaint in the immediate postoperative period. The purpose of this study was to evaluate the preemptive analgesic effects of a single, postoperatively administered epidural bolus of Fentanyl and Bupivicaine in patients that underwent lumbar decompressive surgery.

Methods: We performed a randomized, double-blinded, clinical trial. After approval from the institutional review board and local ethics committee, informed consents were obtained, and 45 patients scheduled for lumbar decompression from December 2015 to August 2017 were randomly assigned to receive a postoperative bolus of 10-mL solution of 50 mcg of Fentanyl, 0.125% Bupivacaine, and 0.9% saline solution via an intraoperatively placed epidural catheter immediately after wound closure, before dressing application. Facial pain scale scores (from 0 to 10) were measured at 3 time points after surgery (fully awake at recovery room, transfer to ward, first postoperative day). Postoperative need for oral analgesics, time to independent ambulation, associated adverse events, and time to hospital discharge were also evaluated.

Results: Pain scores were noted to be significantly lower at all time points except upon transfer to recovery room in the epidural group ($P<0.05$). In turn, they also received less on-demand oral pain medications ($p=0.000$). The mean time to ambulation was 0.09 days in the epidural group and 0.91 days in the decompression-alone group ($p=0.000$). Criteria for hospital discharge was usually met on Day 0 in the epidural and Day 1 in the control group ($p=0.000$). No adverse events or complications related to Fentanyl use were observed.

Conclusions: A postoperative bolus of Fentanyl and Bupivacaine is effective in reducing early postoperative pain without the related complications of opiod administration.

3. **Outcomes of Arthroscopic Proximal Biceps Tenodesis at the Articular Margin: A Retrospective Case Series**

Janos F. Vizcayno, Jr.
Institute of Orthopedics & Sports Medicine, St. Luke's Medical Center

Purpose: The purpose of this study is to evaluate the incidence of postoperative residual anterior bicipital groove pain, revision rate, incidence of Popeye deformity and outcomes of arthroscopic proximal biceps tenodesis located at the articular margin of the humeral head by a suture anchor fixation. Methods: Medical records of patients who underwent arthroscopic proximal biceps tenodesis at the articular margin of the humeral head from four orthopedic surgeons with the same operative techniques were retrospectively collected and evaluated. Patient outcomes were assessed postoperatively with presence of residual anterior bicipital groove pain/ tenderness, numeric rating scale, objective shoulder scores (UCLA and Simple Shoulder Test), need for revision surgery, and presence of Popeye deformity. All patients had a minimum of 12 months follow-up. Results: After the application of the exclusion criteria, 30 patients were eligible for the analysis. The mean follow-up period was 22.2 months. Incidence of residual anterior bicipital groove pain/ tenderness was 6.6% (2 out of 30 patients), 3.3% of patients had a Popeye deformity (1 out of 30 patients), and 0% revision surgery. Pain scores improved from 7.33 preoperatively to 1.33 postoperatively (P <.0001), Postoperative UCLA score 31.87, SST score 11.1. Conclusion: Arthroscopic biceps tenodesis performed at the articular margin using a suture anchor results in a low rate of residual anterior bicipital groove pain, low chance of having a Popeye deformity, no revision surgery and with improved postoperative outcomes. Level of Evidence: Level IV, therapeutic case series

Keywords: Biceps tenodesis, Biceps tendinitis

4. Inter and Intraobserver Reliability of the Penny and Beit-CURE Radiologic Classification of Pediatric Patients with Chronic Hematogenous Osteomyelitis

Karla Teresa Araneta, Juanito S. Javier
Department of Orthopedics, UP - Philippine General Hospital

Study Design: Reliability study analysis of Penny and Beit –CURE radiologic classifications of the hospital's pediatric patients with chronic hematogenous osteomyelitis (CHOM).

Objective: To evaluate the inter- and intraobserver reliability of the Penny and Beit –CURE radiologic classifications the hospital's pediatric patients with CHOM.

Methods: Thirty-four pre-operative radiographs gathered from the hospital's Radiology Section were included in the study. Seven orthopedic surgeons (2 consultants, 5 senior residents) classified these radiographs using both Penny and Beit-CURE Classification systems. Two sets of radiographs were sent to the surgeons twice, 4 weeks apart, for them to classify. The Fleiss and Cohen κ statistics were used to determine interobserver and intraobserver reliabilities, respectively.

Results: The Penny Classification had only a slight to fair interobserver reliability (Fleiss κ = 0.17 and 0.24) and a fair intraobserver reliability (Cohen κ =0.35) with a 49.58% average intraobserver

agreement. The interobserver reliability when including all subtypes of the Beit-CURE classification had fair agreement (κ = 0.28 and 0.31) among surgeons. When using only the 4 main types of the Beit-CURE classification, interobserver reliability improved to moderate (κ = 0.41 and 0.54). Interobserver reliability of physeal damage was assessed separately and found to be at 68% (κ = 0.41).

Recommendations: We recommend the use of the Beit-CURE Classification for pediatric chronic hematogenous osteomyelitis with a modification combining B2 and B3 subtypes. We also agree with the original authors that a separate classification for physeal damage be made.

5. Comparison of Pre-Operative MRI, Physical Examination findings versus Intra-Operative Knee Arthroscopy Findings: A 2 year Retrospective Study (Jan 2015-Dec 2016)

Ken Aeson D. Barsales, MD; Jonathan C. Ronquillo, MD, FPOA
Department of Orthopedics, De La Salle University Medical Center

Background: The knee is one most stressed joint in the body and injuries to the knee can be diagnosed with physical examination and diagnostic imaging such as MRI, however the gold standard in diagnosing knee pathologies is still arthroscopy. We aim to determine the accuracy, sensitivity, specificity, positive and negative predictive values of pre-operative physical examination versus MRI compared to arthroscopy of the knee.

Materials and Method: A total of 35 knees in 35 patients, with age ranging from 16-66 years old who underwent diagnostic arthroscopy on our institution were included in the study. Physical examination findings from medical records and the MRI results were reviewed. Findings were compared and the sensitivity, specificity, accuracy, positive and negative predictive values were analyzed and evaluated.

Results: Physical examination had sensitivity of 86.96%, specificity of 83.33% and Accuracy of 91.4% in diagnosing ACL tear, sensitivity of 53.33%, and specificity of 75% and accuracy of 65.71% for medial meniscus tear and sensitivity of 90% specificity of 96% and accuracy of 94.28% for lateral meniscus tear.

MRI findings for ACL tear showed sensitivity of 88%, specificity of 90% with accuracy of 88.57%. Medial meniscus findings had a sensitivity of 83.3%, specificity of 68.18% and accuracy of 71.4% while lateral meniscus showed sensitivity of 58.3% specificity of 90.48% and accuracy of 74.2%. Gathered results noted accurate diagnosis of ACL and lateral meniscus injury by doing correct physical examination however MRI was noted to be superior in diagnosing medial meniscus injuries

Conclusion: A complete and correctly done physical examination alone can accurately diagnose knee pathologies. MRI can also be used to confirm and diagnose injuries especially those with equivocal physical examination findings.

Keywords: Diagnostic arthroscopy; pre-operative physical examination; MRI

6. A Cadaveric Study on the Safe Placement of Portals for Arthroscopic Snapping Scapula Surgery in Filipino Males

Jose Mari Gerald O. Arpilleda, Jonathan Ronquillo
Department of Orthopedics, De La Salle University Medical Center

Purpose: To determine a safe approach for the creation of portals for Posterior Shoulder Arthroscopy in adult Filipino Males.

Materials and Methods: The study was conducted on 10 shoulders from 5 adult male Cadavers positioned prone. The shoulders were placed in the "chicken wing" position. Landmarks around the periscapular area were then identified and marked with a surgical pen. A Steinmann pin was used to create the portals. The superior visualization portal was placed 0.5 cm inferior to the scapular spine and 3 cm from the medial scapular border. The inferior working portal was then created midway between the scapular spine and the inferomedial scapular angle, 3 cm from the medial scapular border. Dissection was then carried out via a midline vertical incision to the back. The dorsal scapular and spinal accessory nerves were identified and their distance from the trocar measured with a manual caliper (Acosta)

Results: Superior Portal. In 20% (n = 1) had the left spinal accessory nerve course 1 cm medial to the superior portal, while the contralateral spinal accessory nerve was located 0.5 cm laterally to it. Inferior Portal. One specimen (533) had its right dorsal scapular nerve course 1 cm medial to the Inferior portal. Six shoulders (4 - Left, 2 - Right) from 4 specimens (80%) had the Dorsal Scapular nerve located less than 1 cm from the trocar. Two of these were almost directly beneath the Steinmann pin.

Conclusion: Surgeons should place their portals more medially, beyond the suggested 3cm distance from the medial scapular border in order to prevent iatrogenic injury.

7. Short-Term Outcomes of Ultrasound-guided versus Blind Corticosteroid Injection of the Subacromial Space of the Shoulder for the Treatment of Impingement Syndrome: A Randomized Control Trial

Jana Francesca T. Tumpalan, MD, Jose Antonio C. Umali, MD, DPBO, Jonathan C. Ronquillo, MD, FPOA
Department of Orthopedics, De La Salle University Medical Center

Background: Subacromial impingement syndrome is a common cause of shoulder pain. Corticosteroid injections administered through a blind, landmark-based approach have proven to be an effective mode of treatment. Recently, ultrasound-guided injections have been used to facilitate a more accurate localization of the subacromial space. This study aimed to measure the effectiveness of ultrasound-guided compared with blind subacromial injections in treating symptoms of shoulder pain and functional impairment due to impingement syndrome.

Methods: Thirty-three shoulders in 32 patients with clinical and ultrasonographic diagnosis of subacromial impingement syndrome were included and randomized to receive either blind (Group A) or ultrasound-guided (Group B) injections with an infiltrate of methylprednisolone with lidocaine. Outcome measures evaluated were the Constant Shoulder Score (CSS) for function and Visual

Analogue Scale (VAS) score for pain, obtained at pre-injection, immediate post-injection, and at 1 and 4 weeks thereafter.

Results: Both groups showed improvement in functional and pain scores from baseline to 4 weeks post-injection. The Constant score significantly increased from 61 ± 14 (mean ± SD) to 81 ± 6 ($p < .001$) in Group A, and from 58 ± 15 to 82 ± 6 ($p < .001$) for Group B. The mean difference in Constant score was not significant between the two groups ($p = .64$). The VAS score significantly decreased from 5.9 ± 2.2 to 1.3 ± 0.3 ($p < .01$) for Group A, and from 6.2 ± 1.8 to 1.3 ± 0.8 ($p < .01$) for Group B. The mean decrease was not significant between the groups ($p = .62$).

Conclusions: There were no significant differences found between ultrasound-guided and blind subacromial steroid injections in terms of reducing pain and functional impairment among patients with impingement syndrome. Landmark-based injections should be the method of first choice, since ultrasound-guided injections may not provide additional clinical benefit that would justify additional costs.

Keywords: subacromial impingement syndrome, shoulder injection, ultrasound, corticosteroid

8. Which Whiteside's Line?

Ervin Chino N. Tayag, MD, Jose Fernando C. Syquia, MD, FPOA
Department of Orthopaedics, University of Santo Tomas Hospital

Background: The anteroposterior axis (Whiteside's line) of the distal femur has been used to orient the femoral component in total knee replacement surgery. Although initially described as a line connecting the deepest point in the patellar groove and the center of the intercondylar notch, others have used a line connecting the deepest point in the patellar groove to the highest point of the intercondylar notch. Furthermore, depending on the system used, the axis could be determined on the distal femur before or after the distal femoral cut has been made.

Objective: The objective of this study was to determine if the value of Whiteside's line varied depending on which landmarks were used and on whether it was taken before or after the distal femoral cut.

Methods: The distal femur of 40 knees from 20 adult cadavers were dissected free of soft tissues and photographed. The following landmarks were identified: deepest point of the patellar groove, highest point of the intercondylar notch, center of the intercondylar notch, lateral epicondylar prominence, and medial epicondylar prominence. Three lines were drawn: one connecting the patellar groove to the highest point of the intercondylar notch (Line A); one connecting the patellar groove to the center of the notch (Line B); and one connecting the epicondyles (transepicondylar axis). The distal femur was cut using a total knee distal femoral cutting instrumentation that would take out 9 mm of bone and then photographed. The same landmarks and lines were identified. The angles subtended by the various lines against a line perpendicular to the transepicondylar axis were recorded. Values in internal rotation were assigned negative numbers while values in external rotation were assigned positive numbers.

Results: The mean results of Lines A and B in both the uncut and cut distal femurs were negative. Line A measurements tended to be more negative than Line B measurements. However, there were no statistical differences among the various measurements taken.

Conclusion: Based on this report, measurements taken from the deepest point of the patellar groove to either the highest point of the notch or the center of the notch may be used to determine Whiteside's line. Furthermore, the results will not be statistically different if taken before or after cutting the distal femur. However, since it is beneficial to avoid internal rotation of the femoral component in total knee replacement, the use of the center of the notch may be a better option than the use of the apex of the notch.

9. Association between a Concomitant Anterolateral Ligament Tear and Pivot Shift Before and After Single Bundle Anterior Cruciate Ligament Reconstruction: A Retrospective Cohort Study

Albert Lesmana, Antonio A. Rivera
Department of Orthopedics, Makati Medical Center

Introduction: Regardless of the type of intraarticular Anterior Cruciate Ligament (ACL) reconstruction performed, a certain degree of rotatory instability is often seen after surgery. Recent studies show that the Anterolateral Ligament (ALL) plays a significant role in maintaining stability during internal rotation of the tibia at high knee flexion angles. Unrecognized damage to the ALL could explain the observation of positive pivot shift despite a surgically reconstructed ACL.

Objectives: The primary objective of this study was to determine whether a concomitant ALL tear is associated with high grade pivot shift before and after ACL reconstruction

Methods: This was a retrospective observational analytical cohort study of patients that underwent single bundle ACL reconstruction surgery in our institution from October 2014 to March 2017. One hundred and forty four patients were included in this study. All data were extracted from the department ACL registry. All knees MRI were reviewed by the author and co-author to determine the integrity of the ALL. Subjects were divided into 2 groups based on grade of pivot shift prior to surgery. The prevalence of ALL tear based on MRI was further compared between high grade and low grade pivot shift groups.

Results: Overall, the prevalence of a concomitant ALL tear was 70.83%. Comparing the prevalence of concomitant ALL tear between high grade pivot shift group (73.11%) and low grade pivot shift group (60%), there is insufficient evidence to demonstrate an association between pre-surgery high grade pivot shift and concomitant ALL tear. After the surgery, none of the patients had a high grade pivot shift nor was positive for Lachman's test.

Conclusion: There is a high prevalence of concomitant ALL tear in patients with torn ACL. The presence of torn ALL has no correlation with grade of pivot shift before and after single bundle ACL reconstruction.

Keywords: Anterolateral ligament injury, Anterior cruciate ligament injury, Single Bundle Acute anterior cruciate ligament reconstruction, Pivot Shift.

10. Functional Outcome and Proprioception after ACL Reconstruction Using the Pes-Sparing Technique

Kristine R. Italia
Institute of Orthopedics & Sports Medicine, St. Luke's Medical Center

Strategies to improve the outcome of ACL surgeries using the hamstring graft are being utilized. One of these is the pes-sparing technique wherein the insertion of the hamstring graft at the pes anserinus is preserved.

This retrospective study aims to compare the outcome of patients who underwent primary ACL reconstruction using the pes-sparing technique versus the standard technique. Primary outcome includes subjective knee evaluation of function and activity level using the Lysholm Knee Questionnaire and the Tegner Activity Scale, and time to return to play. Secondary outcome includes proprioceptive function using the single-legged hop tests.

After at least 2 years from surgery, no significant differences were noted between the two groups in terms of subjective knee evaluation of function and activity level, time to return to play, and proprioception. 100% of the patients in the standard group were able to return to sports in 8.91 months, with 82% returning to the preinjury level and with Tegner score at final follow-up of 7.68. On the other hand, 93% of the patients in the pes-sparing group were able to go back to sports in 8.24 months, wherein 70% were able to return to preinjury level with Tegner score at final follow-up of 7.49. 100% of patients who completed the hop test in both groups had normal results with limb symmetry indices of more than 100%.

In conclusion, outcomes of the pes-sparing technique are favorable. Majority of patients were able to return to preinjury status with good to excellent knee function. These are, however, not significantly better from the standard technique of ACL reconstruction. Hence, the pes-sparing technique may be an option for ACL reconstruction; however, more studies are recommended in order to evaluate its advantage over the standard ACL reconstruction.

Keywords: ACL reconstruction, pes-sparing technique, hamstring graft

11. A Clinical Comparison of SIGN Pediatric Fin Nailing and Flexible Elastic Nailing in Fixation of Femoral Shaft Fractures in Pediatric Patients ages 5-13 Years Old

Jan Micah Tan
Department of Orthopedics, Southern Philippines Medical Center

Background: Operative treatment for femoral shaft fractures in children of school age is recommended with an advantage of decreased hospital stay and earlier return to school and daily activities of living as compared to non-operative treatment. Flexible elastic nails has been a choice of many surgeons since the technique avoids violating the physis and blood supply to the femoral head. However, recent studies have shown rigid nailing with a lateral trochanteric entry point has decrease of these complications. The SIGN pediatric fin nail is a rigid nail which utilizes a lateral trochanteric entry point. This study aims to compare the clinical outcome of the SIGN pediatric fin nail vs the commercially available flexible elastic nails in treatment of femoral shaft fractures in children

Methods: Children ages 5-13 years old, with femoral shaft fractures, was be included in the study. Pathologic Fractures were excluded. Clinical outcome based on radiographic healing rate, time of weight bearing was compared between the 2 groups. Other parameters were complications such as infection, malunion, nonunion, avascular necrosis of the femoral head and growth arrest.
Results

The average time for signs of radiographic healing for the SIGN Pediatric fin nail group was 3.52 weeks, while the flexible elastic nail was 3.34 weeks. Average time for full weight bearing in the SIGN pediatric fin nail group was 7.29 weeks, while the flexible elastic nail group was 8.34. The T-test value of the SIGN pediatric fin group is 0.559, with a P-value of 0.580 and the elastic nail group has a T-test value of -1.162, with a P-value of 0.252. There was 1 patient in the SIGN pediatric fin nail group that developed chronic osteomyelitis. There was no malunion and nonunion in both groups. There was no avascular necrosis of the femoral head, no shortening and limb length discrepancy in both groups.

Conclusion: There is no significant difference in the clinical outcome between the SIGN pediatric fin nail and the flexible elastic nail in the treatment of femoral shaft fractures in children ages 5-13 years old, in terms of radiographic healing rate, return to full weight bearing, and complications.

12. Open Reamed Interlocked Intramedullary Nailing of Long Bone Fractures of the Lower Limb Using Surgical Implant Generation Network (S.I.G.N.) Nails: Radiographic Results and Clinical Outcomes at a Minimum of 12 Months Follow-up

Abraham L. Saad, Cesar S. Cuenca
West Visayas Medical Center

Evidence show that closed reduction with reamed interlocked intramedullary nailing provides the best outcome for tibia and femur shaft fractures in terms of union rates (97-98%) and complication rates. Because of this, the popularity of performing an open reduction has dwindled through the years. However, in developing countries such as the Philippines, many patients rely on humanitarian aids to meet the expense of treatment for long bone fractures of the lower limb. These free implants may sometimes require a technique which utilizes an open fracture reduction method. In this descriptive cross-sectional study, we reviewed the midterm and long term outcomes (radiographic and clinical) of patients who were recipients of the free implants from SIGN Fracture Care International, and have undergone open reamed interlocked intramedullary nailing with a minimum of 12 months follow-up. Radiographic results were scored using the Radiographic Union Scale for Tibial fractures (RUST) score and functional outcomes were determined using 3 different patient-reported outcome measures. A total of 139 patients were included in the study of which, 100 (71.9%) patients involved the femur and 39 (28.1%) involved the tibia. The RUST mean score was 10.33 (SD 1.31) indicating good radiographic union. Mean scores for the Modified Harris Hip Score (mHHS) was 96.82 (SD8.45); 98.04 (SD 1.97) for the Lower Limb Core Function Scale and 1.69 (SD 1.60) for WOMAC. Average scores of these tools suggested good to excellent functional outcome. Using the Spearman's rho test for correlations, a significantly high positive correlation between the radiographic results and clinical outcomes were demonstrated. These results suggested high radiographic union rates and good functional outcomes.

PODIUM PRESENTATION PAPER ABSTRACTS (12)

Nov. 16, 2017

Palawan III

1. Medial Synovial Plica and Medial Femoral Condyle Cartilage Degeneration: Arthroscopic Classification

Janmichaelben G Miranda, MD, A/Prof Wilson Wang Ee Jen, Mark Chong MD, MRCS
Department of Orthopaedic Surgery (Division of Hip and Knee Surgery), National University Hospital Singapore

Purpose: The purpose of this study is to make a simplified medial plica classification that will describe both the structural characteristics of medial plica and its effect on the medial femoral condyle articular cartilage.
Type of Study: Retrospective case series study of consecutive patients who underwent arthroscopic surgery.

Methods: A retrospective case series study was conducted to review the findings of 138 arthroscopic knee surgery performed by one surgeon from February 2012 to February 2017. Special attention was focused to the size of medial plica and the characteristics of the cartilage degeneration on the surface of the facing medial femoral condyle. We classified medial plica into 4 types: Type N (No Plica), Type A (Narrow), Type B (medium), and Type C (Broad). Type C was further sub-classified based on the severity of cartilage lesion: Type C0 (No cartilage lesion), Type C1 (Mild), Type C2 (Moderate), Type C3 (Severe).

Results: A total of 138 arthroscopic knee surgeries records were collected, 129 were included in the study and the rest removed due to exclusion criteria. The incidence rate of the medial plica was 69% in this series. It was higher in male (57.30%) than in females (42.70%). In patients with diagnosis of osteoarthritis the incidence of medial plica was 65.38%. Overall, there were 40 (31%) Type N, 27 (20.9%) Type A, 30 (23.3%) Type B and 32 (24.8%) Type C. The broad types (Type C) was further split into the following: 6 patients under Type C0, 11 Type C1, 7 Type C2 and 8 Type C3. The proportion of males with plica classified as medium (Type B) is significantly higher than that of females, while the proportion of females with PLICA classified as broad (Type C) is significantly higher than that of males. Based on the Kruskal-Wallis test, subjects with PLICA classified as broad C are generally older.

Conclusion: Our study shows the relationship between the medial plica and its effect on the medial femoral condyle articular cartilage. We further sub-classified Type C (Broad Type) medial plica into 4 types based on the degree of cartilage involvement. Cartilage lesion was observed in two specific areas, either at the edge or at the anterior part of the medial femoral condyle. We believed that repetitive abrasion and impingement between the Type C (Broad) medial plica and the opposite medial femoral condyle during daily activities can cause this cartilage degeneration over time.

Keywords: Medial plica, Medial plica syndrome, medial plica classification, arthroscopic surgery.

2. Using 3D-Printed Customized Model to Assist in Localizing an Inferiorly Displaced Meniscal Flap Tear: A Case Report

Chee Hoe Kong1, Janmichaelben G. Miranda[2], Felix Austin Lee[3], Wilson Wang[1]

[1]Department of Orthopaedic Surgery, Yong Loo Lin School of Medicine, National University of Singapore, Singapore

[2]Armed Forces of the Philippines Medical Center, Philippines

[3]Centre for Additive Manufacturing, National University of Singapore, Singapore

Correspondence to: Associate Professor Wilson Wang, Department of Orthopaedic Surgery, NUHS Tower Block, Level 11, 1E Kent Ridge Road, Singapore 119228; doswangw@nus.edu.sg; Tel: +65 6772 4598; Fax: +65 6778 0720

Inferiorly displaced meniscal flap is difficult to visualize on arthroscopy. It has to be identified before the procedure to accurately investigate the region of interest with an arthroscopic hook probe. Hence, in addition to magnetic resonance imaging scan, a three-dimensional (3D) replica of the knee was created to localize the displaced fragment precisely. 3D printed models can play a significant role for junior surgeons in surgical planning and training, while possibly reducing the rate of re-surgery.

Keywords: Meniscal tear, Knee Arthroscopy, 3D printing, Additive Manufacturing

3. Relationship of Sagittal Spino Pelvic Alignment, Facet Jointangle, and Gender of Patients with Degenerative Spondylolisthesis among Adult Patients Aged 40 and Above in Chong Hua Hospital (Fuente): A Three-Year Retrospective Study

Ezekiel Q. Ilano, MD, Richard Condor, MD, Kenneth Bryan Tan, MD

Department of Orthopaedics Chong Hua Hospital

Objective: To determine the correlation in spino-pelvic alignment, facet joint angle, and gender in patients diagnosed with degenerative spondylolisthesis through MRI and Xray among patients in Chong Hua Hospital (Fuente) in the year 2014-2016.

Background of study: Spondylolisthesis is defined as anterior or posterior slippage of a vertebra with an intact neural arch. In the lumbosacral spine, it occurs more commonly at the L4-L5 level, followed by the L5-S1 level, in adults 40 years or older. Controversy continues regarding the etiology and pathomechanism of the vertebral slippage process. It is thought that the mechanical stress on the motion segment level causes degenerative changes of its disc and facet joints, thus leading to segmental instability. It is also thought that structural factors predispose to this mechanical stress process.

Study design: This is a 3-year retrospective cross-sectional chart review.

Study Population and Setting: Patients 40 years old and above diagnosed with degenerative spondylolisthesis of the L4-L5 motion segment level through Xray and MRI at Chong Hua Hospital from January 2014 until December 2016 will be included.

Result: Patients with degenerative lumbar spondylolisthesis have an average age of 65.48 years old while 65.2% were females. There is a significant correlation with Pelvic tilt, pelvic incidence and sacral slope among patients with degenerative lumbar spondylolisthesis among adult patients aged 40 and above in Chong Hua Hospital (Fuente) in the year 2014-2016.

Keywords: Degenerative spondylolisthesis, sagittal spinopelvic alignment

4. Avulsion Fracture of the Calcaneal Tuberosity Treated With a New Technique

Joven Cantos, MD, Jonathan Ronquillo, MD, FPOA
Department of Orthopedics, De La Salle University Medical Center

Purpose: To present a case of calcaneal tuberosity avulsion fracture treated with a new technique.

Summary: We present a case of a 29 year old male who sustained an extra-articular avulsion fracture of the calcaneal tuberosity with complete loss of Achilles tendon function treated with excision of the bony fragments and tenodesis using double Krakow technique. This patient had excellent functional outcome after 1 year of follow-up.

Discussion: Several techniques have been described to treat similar injuries. Most cases are treated with surgical fixation and dependent on bone to bone healing. This paper presents a treatment option for patients with poor bone quality.

Conclusion: Treatment using this new technique can be used for patients with similar injuries with varying indications.

5. Correlation among Clinical, Radiographic, and Patient-Reported Outcomes after Operative Treatment of Distal Radius Fractures

Joven Cantos, MD, Rene Generoso Rivera, MD, FPOA
Department of Orthopedics, De La Salle University Medical Center

Objective: To determine if there is correlation between the use of patient rated wrist evaluation tool and radiographic as well as functional outcome parameters in patients with distal radius fracture treated operatively at De La Salle University Medical Center

Methods: This is an analytical cross-sectional study. Patients were evaluated three times: their first visit after injury (baseline); again at four weeks then at eight weeks following fracture treatment. To evaluate disability, the Patient-rated Wrist Evaluation (PRWE) questionnaire was used. Radiographic evaluation was done using measurements taken from standard wrist radiographs. Measurements were graded using the Sarmiento modification of the Lidstrom scoring system. Range of motion measurements were taken using goniometry (LaStayo, Armstrong, and Norkin techniques). Measurements were graded using a 30-point scale system introduced by Kasapinova et al. Statistical correlation for description of the association between parameters was done with the Spearman rank correlation.

Results: A total of 11 patients were included in this study. Mean age of 52 years. Spearman's rank was used to determine correlation and results showed no statistically significant correlation between radiologic and patient-reported outcomes at 4 weeks ($p = 0.47$) and 8 weeks ($p = 0.37$). No significant correlation was found between the radiographic scores and range of motion at 4 weeks ($p = 0.29$) and at 8 weeks ($p = 0.27$). Significant correlation was found between range of motion scores and patient rated functional scores at 8 weeks ($p = 0.000587$).

Conclusion: Fracture treatment outcome evaluation following distal radius fractures should extend beyond radiography to ensure comprehensive treatment. A patient rated evaluation tool is valuable

in assessment of treatment outcomes following distal radius fracture surgery.

Keywords: Distal radius fracture, outcome, patient rated scores

6. Functional Outcome after Arthroscopic Anterior Cruciate Ligament Reconstruction Using Hamstring Tendon Graft in Philippine Orthopedic Center

Carlo Antonio D. Alvarez, MD, Patrick H. How, MD, Jason Santiago, MD, Rafael Jurilla, MD
Philippine Orthopedic Center, Sports Unit, Adult Orthopedics Department

Background: Anterior cruciate ligament deficiency leads to knee instability. The goals of the ACL reconstruction are to restore stability to the knee; allow the patient to return to normal activities, including sports; and to delay the onset of osteoarthritis with associated recurrent injuries to the articular cartilage and loss of meniscal functions. The number of cases of arthroscopic ACL reconstructions done in the Philippine Orthopedic Center had increased over the past three years.

Objective: The study was done to document the demographics and evaluate the functional outcome of patients who underwent arthroscopic ACL reconstruction using hamstring tendon graft done in Philippine Orthopedic Center

Material and methods: From January 2014 to June 2016, thirty patients who underwent ACL reconstruction using hamstring tendon graft fixed with endo-button for femur fixation and interference screw for tibial fixation were included in the study and the demographics of patients and their functional outcome was observed using Lysholm Knee Score and IKDC knee score 2000.

Results: The mean age of patients was 25.6 years with male preponderance. Sports related injury was the most common cause of ACL deficient knee in our patients, followed by injuries secondary to motor vehicular accidents and lastly were due to accidents related to activities of daily living. Mean Lysholm scores at three months post – reconstruction had fair results (80.32±6.19), at six months and one year, the scores showed excellent results (92.56±4.78, 98.09±1.69). Mean subjective IKDC score at three, six and 12 months was 56.22±7.30, 71.30±15.63, 90.06±2.0, respectively.
Conclusion: The results from the ACL reconstructions using hamstring tendon autografts were similar to other studies with regard to functional outcome of the knee.

Keywords: Anterior cruciate ligament, hamstring graft, endobutton, arthroscopy

7. A Cost Utility Analysis between Conservative and Delayed Surgical Management of Tibial Shaft Fractures

Gaston Juan Pastor Roces, MD
Philippine Orthopedic Center

Objective: To assess the cost utility between conservative management vs delayed surgical intervention of mid-shaft tibial fractures based on the research methodology put forth by the comparative study of Estillore Et Al.

Methodology: The sample population was asked to create costing diaries during their time in "illness" for 1 year. An EQ-5D questionnaire was given to each participant at the start of the illness, or index episode, and another after 1 year.

Results: Data showed a significant increase in costs with delayed management but with a better overall outcome and with a cost utility ratio of 21,782php/QALY. The conservative group had less favorable outcomes with a cost utility ratio of 10,367php/QALY at average.

Conclusion: Even though costs for the conservative management were significantly less, Quality of Life significantly decreased in this intervention. On the contrary, there was a significant improvement in the Quality of Life for the delayed intervention group at a significantly high cost. Delayed intervention, though costlier, provides a better outcome than the conservative group.

8. Outcomes of Patients with Unstable Intertrochanteric Fracture Treated with Dynamic Condylar Screw versus Proximal Femoral Lock Plate in a Delayed Surgical Setting

Vick Roland Ladica, MD
Philippine Orthopedic Center

Background. Treatments of unstable intertrochanteric fracture have proven to be difficult, especially in our setting where most patient are being treated in a delayed setting. One important aspect of treatment for this kind of fracture is the choice of implant. Choice of implant would affect the operation, functional outcome, union and the development of complication. This study aims to compare two implants namely, Proximal femoral lock plate (PFLP) and Dynamic condylar screw (DCS) in the treatment of unstable intertrochanteric fracture in the delayed setting.

Method. 33 patients were enrolled in the study, 20 for the PFLP group and 13 for the DCS group. Intraoperative/ perioperative values were recorded including operative time, umber of blood transfusion and length of hospital stay. Follow ups were done every month for 6 month and 1year post operation to monitor union and complications. Modified Harris hip score was done at the end of follow up to test functional outcome.

Results. There was no difference between PFLP and DCS with regards to intraoperative/ perioperative values as measured by the intraoperative time (p-value=0.342), the number of blood transfusion (p-value=0.648) and, the length of hospital days (p-value=0.619). There was also no significant difference between the two groups with regards to clinical union (p-value=0.362). There was, however, significant difference (p-value=0) between PFLP and DCS with regards to functional outcome with PFLP showing better result using the modified Harris hip score. With regards to complication, we note no significant difference between the 2 groups despite having 2 cases of infection (p-value=>0.99) for the DCS group and 1 case for each group of implant failure (p-value=0.16).

Conclusion. Patient with unstable intertrochanteric fracture can benefit from both Proximal femoral lock plate (PFLP) and Dynamic condylar screw (DCS) since both showed similar intraoperative values, complications and rate of clinical union. Although, with regards to functional outcome, Proximal femoral lock plates exhibit better results as compared to the Dynamic condylar screws.

9. On Thin Ice: A Retrospective Study on Ice Skating-Related Injuries Seen at a Tertiary Hospital

Anthony Regalado
Department of Orthopedics, The Medical City

Although relatively new to the country, ice skating has seen a steady rise in popularity over the last few years. Along with this rise is an increase in ice skating-related injuries, particularly in patients brought for consult at a local tertiary hospital. Although the incidence of ice skating injuries is low

according to available literature, the propensity of incurring significant injury in the form of fractures is still significant. As such, there is a need for characterizing these injuries in order to be able to focus the preventive strategies needed to reduce their occurrence. A retrospective chart review was utilized for this study, where 31 patients who were admitted at the ER for an ice skating-related injury during a 28-month period were evaluated for age, sex, site of injury and configuration of fractures incurred. From the data, a majority of those injured were females (54%) from the 11-20 year old age range (74%), with the lower extremity being affected the most (58%). A spiral fracture configuration (52%) was the most commonly observed pattern. From these data, it can be inferred that most of the injuries were due to a twisting mechanism from falls, with the lower extremity being affected the most. As such, fall prevention and lower extremity protection may be adopted as effective strategies in order to prevent fractures secondary to ice skating from occurring.

Keywords: Ice skating; Skating injuries; Health education

10. A Cohort Study on Continued Sports Activity Using the American Orthopaedic Foot and Ankle Society Scoring After Rehabilitation in Patients with Achilles Tendinopathy

Adriel Vincent L. Ang, MD, Carmelo L. Braganza, MD, FPOA
Department of Orthopaedics, University of Santo Tomas Hospital

Tendinopathy is a syndrome with tendon pain, tenderness, and swelling that limited the tendon function, is one of the most common injures in both athletic and nonathletic populations. Conservative treatment is recommended as the initial strategy. The program of treatment should be based around eccentric exercises for the tendon.

Objective of this study is to determine if eccentric calf strengthening is beneficial to patients with Achilles Tendinopathy who continue to engage in physical activity by using the American Orthopaedic Foot and Ankle Society Scoring. 19 patients diagnosed with Achilles Tendinopathy underwent 1 month of rehabilitation therapy with 2 sessions a week and progression was monitored by completion of the AOFAS scale assessment. Data collected was statistically analyzed using the paired t-test. Data showed significant t-test scores and according to the results, there is a significant effect of concentric strengthening exercises on continued activities for patients with Achilles Tendinopathy.

Keywords: Achilles Tendon, Achilles Tendinopathy, concentric stretching exercises, AOFAS

11. Pinch Strength Correlation with Carpal Tunnel Syndrome Severity - A Preliminary Study

Jerre C. De Guzman, MD, John Hubert C. Pua, MD, FPOA
Department of Orthopedics, University of Santo Tomas Hospital

Introduction: Carpal tunnel syndrome (CTS) is the most common entrapment neuropathy in the upper limbs. There is no one test that could be identified as a "gold standard" for carpal tunnel syndrome diagnosis with insufficient evidence to recommend one test over another. Current available evidence does not allow one to identify a relationship between patient symptoms and electrodiagnostic test results. Tip pinch and tripod pinch strength rely more on the thenar muscles and are therefore more suitable measures of motor involvement in CTS. This study hopes to establish a role for tip pinch and tripod pinch testing as a simple and objective screening tool for CTS. The objective of this study is to measure pinch strength (tip to tip and tripod pinch) as a predictor for the severity of CTS in relation to Nerve Conduction Velocity (NCV) findings.

Methods: Twenty participants were included from the study period from October to November 24, 2016, based on 5% (50 out of 1000) prevalence rate, and 95% confidence interval, a sample size of 39 was needed for the study given a number of 79 as the total carpal tunnel population from USTH who underwent surgery. Consecutive sampling was done and all patients were seen at the University of Santo Tomas Hospital (USTH), patients suspected of having carpal tunnel syndrome based on history and examination using the list of six clinical criteria (CTS-6, Table .1) and confirmed NCV were included. The severity of carpal tunnel syndrome was classified as mild, moderate, or severe according to the American Association of Electrodiagnostic Medicine guidelines. All participants were asked to sign an informed consent. A control group with similar age group and no diseases affecting the hands was also included.

Results: There was a total of 20 participants included in the study (2 male, 18 female) with a mean age of 46 years (26-66years old). 90 %(18/20) were right-hand dominant, 10 % (2/20) were left-hand dominant. Mean body mass index was 24.71. Half of the participants in the study group had symptoms bilaterally, while the other half had symptoms only in the right hand for a total of fifteen affected hands. Disease duration varied from 2 weeks – 2 years with a mean duration of 1 year. Numbness of the hands was the most common presentation which was present in study group (100%). Nerve conduction studies were reported as severe in 2 cases (13%), moderate in 5 cases (38%) and mild in 10 cases (66%). Mean tip pinch strength was 6.15kg-force among the participants and 6.25kg-force among the control group. Mean tripod pinch strength was 7.4kg-force among the participants and 7.425kg-force among the control group.

Conclusion: The pinch strength of patients with CTS were not significantly different as the pinch strength of control group. It is still early to say whether pinch strength has any association with the severity of CTS through NCV findings. The results may be still inconclusive due to the small number of population and data may still vary as this study continues and sample size achieved.

Key words: Pinch Strength, Carpal Tunnel Syndrome Severity

12. Resection Arthroplasty Following Failed Hip Replacement Surgery at Veterans Memorial Medical Center: An Investigation of the Functional Outcome

Maria Carmencita P. Bacnis MD, Rommel W. Melendres MD, Deejay M. Pacheco MD FPOA, Antonio Mario L. De Castro MD FPOA, Paul Ruel Camina MD FPOA, Ruben C. Cardenas MD FPOA
Department of Orthopaedic Surgery, Veterans Memorial Medical Center

Objective: To evaluate function and quality of life of patients submitted to resection arthroplasty, especially the return to function and freedom from pain in patients with failed hip arthroplasty to be able to offer an alternative procedure when routine revision hip arthroplasty is not a viable surgical option.

Method: Prospective descriptive study where 7 patients were evaluated. The evaluation consisted in filling in a generic questionnaire on quality of life "SF- 36" and a specific questionnaire for hip function "Harris Hip Score" (HHS). Scores will be analyzed.

Results: The patients of this study presented a higher number of SF-36 domains which classified as high. Scores of all patients in HHS resulted fair. All patients need external support for gait; experienced slight- mild pain and can walk for short distances. Majority of the patients underwent out- patient based physiotherapy and experienced pain in the hip and knee post- operatively.

Conclusion: All of the SF-36 domains were scored high; pain domain was low. HHS score of all patients are fair and similarities in the domains can be observed for both questionnaires. This paper demonstrates that the Girdlestone resection arthroplasty procedure is being reserved for an increasingly elderly population with multiple co- morbidities. This study confirms that for such group of patients, the procedure can still offer acceptable functional outcomes and can be a worthwhile surgical option when employed appropriately. Despite modern technology pushing the resection arthroplasty into surgical small print, it remains a valuable addition to the surgical arsenal for challenging patients with difficult pathology. In such cases, and when all other avenues have been exhausted, it can be the kindest choice for significantly unwell patients and is therefore well worth remembering in modern day practice.

E - POSTER ABSTRACTS

1. The Case of the Floating Body: A Case of Simultaneous Bilateral Humerus and Bilateral Femur Fractures in a Young, Healthy, Active, Adult Filipino Male

Angelo R Gerodias, MD-MBA
Department of Orthopaedic Surgery and Traumatology, AFPHSC – V. Luna Medical Center

There has been very few descriptive papers or case reports on simultaneous bilateral upper and lower extremity fractures. This turned out to be a very uncommon combination of injuries. According to a thorough literature review, this combination of injuries has only been reported two other times, with only one of the two reported cases undergoing surgical management. We are presented with a 22-year old soldier who was involved in a motorcycle accident sustaining fractures on his bilateral humerus and bilateral femur. Patient also incurred fractures on multiple levels of his ribs and an open knee injury. Following the principles of Damage Control Orthopaedics, patient was first stabilized prior to definitive orthopaedic intervention. He eventually underwent plating of his bilateral humerus and antegrade intramedullary nailing of his right femur as first stage procedure two weeks post injury, and antegrade intramedullary nailing of his left femur as second stage procedure 7 weeks later. Patient initially had praxia on his right upper extremity, presenting as wrist drop, which eventually resolved over the course of his recuperation. Within the first post-operative year, the patient was able to walk without assistance and is able to perform regular military duties without difficulties.

2. Surgical Treatment of Complex Femoral Deformities with Severe Coxa Vara in Brown Tumor Secondary to Parathyroid Cancer: A Case Report

Paul Albert C. Manuel
Department of Orthopaedics, V. Luna Medical Center, V. Luna Avenue, Quezon City Philippines

Brown Tumor is a giant cell tumor of bone relating to focal demineralization of bone in the setting of hyperparathyroidism. We report a case of severe coxa vara in brown tumor secondary to Parathyroid Cancer after sustaining a pathologic fracture of diaphysis of right femur. Coxa Vara was secondary to abnormal bone remodeling and osteolysis.Skeletal involvement includes polyostotic lytic lesions and/or diffuse osteoporosis as a result of increased bony resorption due to elevated parathyroid hormone 4. After a period of nonsurgical management the diaphysis of the femur malunited and produced 2 Center of rotation of angulation. Most previous reports of Brown Tumor in Hyperparathyroidism resolve with treatment of the medical condition and are managed conservatively. This may be a unique case of surgical correction of severe coxa vara in a patient with poor bone quality. Patient was treated using using bisphophonates for 4 months then underwent corrective osteotomy, femur with iliac bone graft

3. Reliability and Clinical Correlation of an MRI Classification System for Cervical Canal Stenosis

Antonio Manuel T Saludo, MD; Jose Joefrey F. Arbatin, MD, FPOA
Department of Orthopedics, Chong Hua Hospital

Background: Cervical Spondylotic Myelopathy (CSM) is a condition that arises from chronic compression of the cord at the cervical vertebra. Degenerative changes bring about cervical spinal canal stenosis that causes compression of the cord which leads to histopathologic changes. MRI is currently considered as the most accurate imaging technique for measuring cervical canal stenosis. Despite of this fact, there is currently no standard MRI based grading system for cervical canal stenosis. Recently, a new MRI based grading system for cervical stenosis was developed. With the objective of eventually developing a grading system that would correlate CSM with the degree of

cervical stenosis, this study aims to explore the reliability and clinical correlation of the said grading system.

Method: This is a retrospective cross sectional study conducted in a single center setting which involved 40 cases of patients with complains of axial neck pain seen either at the Out Patient clinic or admitted in this institution from January 2014 to June 2017.

Results: Cross-sectional analysis of data showed that higher MRI grades were associated with higher rates of exhibited symptoms ($p<0.001$).Test of raters' consistency and reliability in grading MRI of patients showed excellent consistency, with a Cronbach Alpha index of 0.987 at 1st rating and 0.981 at 2nd rating.

Conclusion: The MRI classification system for cervical canal stenosis has excellent consistency with regards to Inter rater and Intra rater reliability. Clinical correlation of this grading system is good showing patients with higher MRI grades to have significantly more symptoms than patients with lower grades. The said grading system may be used to develop a grading system for CSM that is based on both MRI images and clinical manifestations.

Key Words: Cervical Spondylotic Myelopathy, Cervical Spinal Stenosis, MRI Grading system

4. The Incidence of Infection in Relation to Time to Theatre among Patients with Open Tibia Fracture in Chong Hua Hospital from January 2009 to December 2016

Alexander S. Ho Jr., M.D., Pablo Ilano, M.D., FPOA

Although early aggressive management of open fractures within the first six hours has been commonly recommended, recent studies have shown that the rate of complications from these injuries are not related to the timing of surgery. The purpose of this study is to examine and evaluate the six-hour rule and its correlation to infection among the patients with open tibia fracture treated in Chong Hua Hospital (CHH).

Seventy-three patients with open tibia fractures were retrospectively reviewed. The time of antibiotic administration from the onset of injury was recorded. The time to theatre was measured as the time between the injury and the commencement of definitive surgical treatment.

An infection rate of 46% was documented among those with GAC IIIA and 38% among those with GAC IIIB. Among the 7 patients who received surgical management ≤6 hours from injury, none developed infection. From the 66 patients who had a time to theatre of > 6 hours, 53 (80%) did not develop any infection while 13 (20%) were noted to have site infection. However, this association between the incidence of infection and time to theatre was not statistically significant utilizing the 2x2 Fischer exact test ($p=0.237$). In this study, 60 (82%) patients did not develop any signs of infection while 13 (18%) were found to have infection. Among those with infection, the mean time of antibiotic administration from injury was 8.15 hours as compared to 3.93 hours among those who had no infection. The difference was statistically significant ($p<0.0001$) using the Mann Whitney U test.
This study showed that the rate of infection was significantly higher among advanced GAC grading and delayed initial antibiotic administration. The risk of developing infection was not increased if the initial surgical management was delayed for more than six hours.

Keywords: Gustilo Anderson Classification, Infection rate, Open fracture, Tibia, Chong Hua Hospital

5. Determination of the Anatomic Hip Center Using Plain Radiographs in the Filipino Population

Jan Princeton Lim, MD; Kenneth Alexis Yap, MD, FPOA
Department of Orthopedics Chong Hua Hospital Cebu

Osteoarthritis of the hip is a common indication in performing total hip arthroplasty. In this procedure, it is desirable to restore the true anatomic hip center. Failure to do so will result in adverse outcomes. Due to the anatomic changes that occur in hip arthritis, determination of the true anatomic hip center may prove challenging.

Regression formulae have been devised to predict the true anatomic hip center in the past. There are currently limited studies in finding the location of the hip center in Asians. This study aims to determine the values of the anatomic hip center in Filipino adults using plain anterior-posterior radiographs of the pelvis and hip.

147 pelvis and hip x-rays were reviewed for this study with 87 females and 60 males. The mean age of females and males were 55.6 ± 22.0 and 46.8 ± 21.2 years old respectively. The mean values of horizontal distance X, vertical distance Y and femoral offset FO for males were 35.9 ± 2.9, 17.8 ± 2.6 and 38.8 ± 5.6 mm respectively. The mean values of X, Y and FO for females were 31.3 ± 3.3, 16.4 ± 2.6 and 36.8 ± 4.5 mm respectively. Positive correlation was found between X and pelvic height PH in males giving a linear regression line equation of X = 0.090 x PH + 15.526. Positive correlation was found between Y and pelvic cavity height PCH in males giving a linear regression line equation of Y = 0.104 x PCH + 9.937. Positive correlation was found between X and pelvic width PW in females giving a linear regression line equation of X = 0.080 x PW + 7.162. Lastly, positive correlation was found between Y and pelvic height PH in females giving a linear regression line equation of Y = 0.083 x PH – 0.943.

Keywords: anatomic hip center, hip center of rotation, hip osteoarthritis, total hip arthroplasty

6. Preoperative Function and Health-Related Quality of Life of Patients with Degenerative Osteoarthritis of the Knee

Jimi Baclayon
Department of Orthopedics, Chong Hua Hospital

Background: Degenerative Osteoarthritis of the knee is one of the most common form of joint disease. The severity of which may affect a patient's quality of life and their function in daily living.

Objective: The main objective is to determine baseline preoperative function and health-related quality of life among patients suffering from degenerative osteoarthritis of the knee.

Methodology: In addition to routine documentation of pertinent history and physical examination findings, all patients undergoing a primary total knee replacement from January 2017 to August 2017 were asked to answer PROM forms as part of their preoperative evaluation. These include: 1. Short form 36; 2. IKDC; 3. KOOS; and 4. KSS. The filled up forms were encoded through the www.orthopaedicscores.com website and the scores were recorded accordingly.

Results: A total of ten patients were able to participate the survey. The mean age was 72 years. The mean preoperative scores were: IKDC 26.3 (SD: 9.1), KOOS 37.68 (SD: 12.92), KSS-Pain 13 (SD:

9.49), and KSS-Function 40.5 (SD: 18.32). The SF-36 component with the lowest score was the Role Limitation due to Physical Health with a mean of 10 (SD: 21.08) which was followed by Physical Function with a mean of 20.5 (SD: 22.42).

Conclusion: PROMs are valuable assessment tools that we can include in the evaluation of patients suffering from degenerative osteoarthritis. The routine assessment of function in daily living and health-related quality of life should be highly considered for institutions offering knee arthroplasty.

7. High Grade Spinal Cord Astrocytoma: First Documented Case in a Tertiary Medical Center and Review of the Literature

John Patrick R. Marquez, Niccolo S. Mamba
Department of Orthopedics, Cagayan Valley Medical Center

Study Design: Case Report

Objective : To present a first documented case of high grade spinal cord astrocytoma in a pediatric patient treated at a tertiary medical center, and to give a comprehensive review of literature on the most current modes of diagnosis, treatment and prognosis.

Summary of Background Data: Primary spinal cord tumor is rare with an incidence of 0.74 per 100,000-person year. Among these reported cases, only 0.03 per 100,000 persons year were accounted for benign and malignant glial histologic feature in the international literature1. In the Philippines, there has been no reported cases of primary malignant spinal cord astrocytoma in the local literature.

Methods: A case of a high-grade spinal cord astrocytoma in a 7-year-old male is presented and the pertinent literatures is reviewed.

Results: A 7-year-old male was admitted in a Tertiary Medical Center with complaints of inability to ambulate and associated low back pain, which rapidly deteriorated to complete paraplegia. MRI of his spine revealed an intradural intramedullary spinal cord lesion extending from T11 to L5 vertebra, with considerations of spinal astrocytoma and ependymoma. The patient underwent en bloc laminectomy T9-L3, partial resection of the intramedullary cord tumor, and subsequent laminoplasty with mini plates and screws. Histopathologic studies showed spinal cord astrocytoma, WHO grade 3 (Anaplastic type). The patient's neurologic status did not improve after the surgery, and is currently for radiation therapy.

Conclusion: This first documented case of malignant spinal cord astrocytoma at a local Tertiary Medical Center shows the classic features of this disease entity based on the literatures written on this subject over the decades. Not much have changed over the years as it still persists to be a challenging entity to treat given its dire prognosis despite the advancement in imaging studies, surgical techniques, instrumentation, radiotherapy and systemic chemotherapy.

Key words: spinal cord astrocytoma, anaplastic spinal astrocytoma, spinal cord tumor, intramedullary astrocytoma, en bloc laminectomy

8. Tumoral Calcinosis in Distal Femur: First Documented Case in a Tertiary Medical Center

Manish Bikram Shah, June Malana, Marco Paolo G. Lasam
Department of Orthopedics, Cagayan Valley Medical Center

Tumoral calcinosis distal femur: First Documented Case in a Tertiary Medical Center
Study Design: Case Report
Introduction: Tumoral calcinosis (TC) is a rare clinical and histopathologic syndrome characterized by calcium phosphate deposition in different peri-articular soft tissue regions, most commonly seen in the large joints of the hips, shoulders, and elbows. Patients will often present with localized swelling and reduced mobility around the involved joints.

Objective: Review of literature related on tumoral calcinosis for further management using as case report illustration.
Methods: A case report of tumoral calcinosis is presented and the pertinent literature is then reviewed.
Case report: We present the case of 49 year old female with 8 months history of gradual increasing, painless swellings along left distal thigh. She was otherwise well and had normal serum calcium and phosphate levels. Plain radiography demonstrated a dense lobulated cluster of calcific nodules within soft tissues consistent with a diagnosis of tumoral calcinosis. This diagnosis was confirmed on the basis of histopathological examination.

Conclusion: This case is the first case reported in our institution. In general, some medical problems present as tumors. Therefore history and physical examination remains an integral part in the diagnosis of diseases. Imaging and histopathological examinations are the commonly used diagnostic procedures that guide all clinicians with their management. Although the pathogenesis in tumoral calcinosis is controversial, the ideal management is surgical excision with complete removal of abnormal tissue to prevent recurrence and focus on reduction of serum phosphate level.

Key words: Tumoral calcinosis, distal femur

9. Aneurismal Bone Cyst of the Lateral Malleolus Treated with Intralesional Curettage and Masquelet Technique: A Case Report done in a Tertiary Medical Center

Manuel A. Gaspar, Jr., Marco Paolo G. Lasam, John Alistair Carag, June Malana
Department of Orthopedics, Cagayan Valley Medical Center

Aneurysmal Bone Cyst or ABC is an osteolytic lesion with sponge-like blood or serum-filled, generally non-endothelialized spaces of various diameters. It accounts for only less than 6% of all bone tumors and is found to be four times rarer than osteosarcoma. In the Philippines, the incidence was reported to account for 9% of all benign tumors and around 3.5% of all primary bone tumors.

This is a case of an ABC involving the lateral malleolus. Given that the incidence of ABC in distal fibula is very low, treatment options are also few. Recent recommendations with regards to treating lesions of the lateral malleolus are contained herein but in our case, we treated the lesion with a two-stage procedure called Masquelet Technique. First, an intralesional debridement and curettage with the application of Polymethylmethacrylate (PMMA) spacer. Second, removal of the spacer and replacement with Autologous Bone Graft 6 weeks after the first was performed. The lateral malleolus consolidated in 9 months follow-up without causing gait abnormalities.

After an extensive literature research, we account this case as the first one documented in the region and possibly in our country

Keywords: Aneurysmal Bone Cyst, ABC, Distal Fibular Tumor, Lateral Malleolar Tumor, Masquelet Technique, Ankle Mass

10. Factors Affecting Follow-Up of Patients at East Avenue Medical Center Treated with the SIGN System Implants

Alfred Miralles, MD, Mary Ruth Padua, MD, FPOA
Department of Orthopaedics, East Avenue Medical Center

Introduction: Trauma causing long bone fractures are costly in terms of medical cost and lost productivity.1 The financial burden falls heavy on procuring the metallic implants needed to fix the long bone fractures of the femur and tibia especially in the 3rd world countries.2 The SIGN is a nonprofit organization that, manufactures orthopaedic implants for the treatment of shaft fractures of the femur and tibia, donates to countries with poor access to implants.3 East Avenue Medical Center-Dept of Orthopaedics received its first few SIGN Implants last 2009 and had 345 patients treated with the SIGN System implants until present

Objective of the study: The objective of the study was to identify the factors affecting the follow-up rate of the patients treated with SIGN System Implants.

Materials and Methods: The study was conducted at EAST AVENUE MEDICAL CENTER, a Level 1 Trauma Center. Included all patients who sustained fractures of the femur and tibia treated with SIGN System implants, a total of 332 patients were counted. The data collected were tabulated using Microsoft Excel Program. IBM SPSS Statistics Software, version 21 was used to calculate the means and standard deviations, frequencies, and percentages of the data gathered. A chi square test was also done to show the relationship of each factors to patient follow-up. Finally, the Poisson Multivariate Regression analysis was done to predict the factors that contributed to the follow-up of patients after treated with the SIGN System Implants.

Results and Conclusion: Factors that could possibly contribute to the follow up of each patient. There were significant values, p value <0.05, rejecting our null hypothesis and accepting the alternative hypothesis, Distance of Current Address of Patient to East Avenue Medical Center (p-value 0.019), and Money Bond Collected (p-value 0.00). Poisson Multivariate Regression analysis was utilized to test the factors contributing to a follow up of a patient within 1 year, and showed values >.05 except for Money Bond (.044). This showed that the implementation of Money Bond had a really significant impact on the follow-up of patients

11. Factors Affecting Follow-Up of Emergency Trauma Consults In a Tertiary Level Medical Center

Alimbuyuguen, O.J.M. M.D., Padua, Ruth M.D. FPOA;
Department of Orthopaedics, East Avenue Medical Center

Background: In orthopedics follow-up is important in improving outcome as well as preventing problems in patients. However there is an absence of data on follow-up in third world countries.

This study aimed to describe the demographic factors as well as clinical factors of patients who were discharged from the emergency department and asked to follow-up at the outpatient department. It also identified the factors that have a significant influence in the follow-up of patients.

Materials and Methods: All orthopaedic trauma patients seen at the emergency department in a 3 month period were included in the study. Demographic factors like age, gender, educational attainment and employment status were recorded. Clinical factors such as the type of injury of patients, and location of injury were also recorded. Follow-ups were cross checked in the outpatient database. Poisson multivariate analysis was used with a significance of $p < 0.005$.

Results Of the 323 patients seen at the emergency department; there was a 30% follow-up rate with predominance of males in early adulthood. Majority were unemployed high school graduates. Most common injuries were to the upper extremities and types of injuries ranged from closed wounds to multiple fractures. Most of the patients had extra articular fractures and open wounds. Demographic factors were found not to influence the follow-up of patients. The type of injury specifically fractures influenced follow-up. Discussion Follow-up is important in preventing complications in orthopedic trauma. By identifying factors affecting follow-up the surgeon can better advice patients who are at risk of not following up.

Keywords Orthopedics, Trauma, follow-up

12. Cost Analysis of Orthopedic Injuries secondary to Road Traffic Accidents

Jon Paolo S. Pineda, MD, FPOA, Mary Ruth A. Padua, MD, FPOA, Misael Jonathan A. Ticman, MD, FPOA
Department of Orthopaedics, East Avenue Medical Center

This study aims to quantify the financial burden of orthopaedic injuries caused by road traffic accidents in the East Avenue Medical Center, from February 2015 to December 2015. Philhealth case rates and Hospital billing statements are utilized, with the purpose of objectifying the costs as opposed to other studies done in neighboring developing countries.

Using the online trauma registry of the Department of Orthopaedics, a census of all patients was taken. These were cross-referenced with Philhealth case rates and hospital billing statements provided by the hospital's electronic billing system.

Results show that road traffic accidents affect orthopaedic patients profoundly, with open fractures and motorcycle accidents having the most severe measured effect.

13. A Study on the Predictive Algorithm proposed by Mackenney for Redisplacement of Distal Radius Fractures Undergoing Closed Reduction

Lawrence Edenino I. Lao, MD
Department of Orthopedics, East Avenue Medical Center

MacKenney identified factors which are predictive of future displacement of previously treated distal radius fractures that underwent conservative management. Among several factors identified the most significant of which are age, initial dorsal tilt, ulnar variance, location of comminution and independence status. Using regression analysis, they created formulas which predict radiographic

outcome using these factors. An application was made accessible on-line which can be used to easily calculate for the instability risk. Subjects will be selected from a database of patients from January to September 2016, based in a single institution. Out of 152 patients, 58 satisfied the inclusion criteria with a mean age of 37.6. 8 (37%) exhibited early instability while 3 (5%) exhibited late instability. Using the application wristcalctm (www.trauma.co.uk/wristcalc), the instability risk of these patients was calculated. It was identified that based on the cutoff point 70% proposed by McQueen, sensitivity of the calculator in identifying instability is at 27%, while the specificity is at 97%. The accuracy of the test is highest at 84%. ROC analysis was done which showed that cut the optimum cutoff is determined at 57 which creates the best balance between sensitivity and specificity. This is below the recommended cutoff proposed by McQueen at 70%.

Based on our study, the algorithm created by MacKenney et al and the proposed cutoff point at 70% by McQueen showed that it could detect instability with high specificity. By adjusting the cutoff point to a lower value, the sensitivity may be increased.

14. The Rate of Morbidity and Mortality in Orthopedic Trauma patients secondary to Vehicular accidents in comparison to non-vehicular related injuries admitted at East Avenue Medical Center

Seyed Armin B. Esmaeili, MD; Mary Ruth A. Padua, MD, FPOA; Ray Allen E. Sinlao, MD, FPOA
Department of Orthopedics, East Avenue Medical Center

Each year nearly 5 million people worldwide die from traumatic injuries. Ninety percent of these injuries occur in developing countries and that number is growing. Road traffic accidents account for 1.2 million of these 5 million deaths. For each death from vehicular related trauma, three to eight more are permanently disabled. Due to the lack of adequate global information on morbidity related to motorcycle injuries, this study aims to determine the rate of morbidity and mortality of admitted patients secondary to vehicular accidents at East Avenue Medical Center using descriptive and retrospective review of clinical records of admitted orthopedic trauma victims. The data gathered during a period of 6 months reveals a mortality rate of 2.5% and morbidity rate of 8.88% for vehicular related trauma patients as compared to a mortality rate of 4.41% and morbidity rate of 4.41%.

Key words: Road Traffic Injuries, Morbidity, mortality, delayed treatment

15. Role of the Trochanter-Shaft Angle in Preoperative Evaluation of Entry Point for Intramedullary Femoral Nailing

Andrew Steven T. Co, MD
Department of Orthopedics, East Avenue Medical Center

Introduction: To verify the correlation of the trochanter-shaft angle (TSA) and entry point using the radiographs of patients who underwent intramedullary femoral nailing using the SIGN Nail System.

Methods: This retrospective study involves the measurement of the TSA on postoperative anteroposterior digital radiographs of patients who underwent intramedullary nailing of the femur using the SIGN Nail.

Results: Among the 59 patients included in the study we noted that 51 cases fell under trochanteric entry while the remaining 8 presented with a piriformis entry point. We also noted that among the

51 cases that had a trochanteric entry point 8 nails were medialized. We then calculated for the mean and standard deviation which showed that the overall average among the population was 10.21+/-1.81. The mean TSA of trochanteric entry nails was measured at 10.04 degrees and the mean TSA of piriformis entry nails was measured at 11.25 degrees.

Conclusion: Intramedullary entry point was trochanteric in 51 cases but 8 of them had a medialized entry point and 8 cases went through the piriformis. A trochanteric entry point is recommended if the TSA is ≤ 12 degrees.
Significance: This study would guide the selection of entry point for antegrade femoral nailing using the SIGN system based on the measurement of the TSA on pre-operative radiographs.

16. Functional Outcome of Closed Reduction, Percutaneous Intramedullary Pinning in Pediatric Radial Neck Fracture treated at Jose R. Reyes Memorial Medical Center

Edward Woo
Department of Orthopedics, Jose R. Reyes Memorial Medical Center

Radial neck fractures account for 5-10% of all pediatric fractures. This type of fractures are not common and are well protected by the surrounding structures. The main mechanism for this injury is a fall on a out-stretched arm. Treatment options varies from a conservative to open reduction and internal fixation. Closed reduction is initially tried to reduce a displaced radial neck fractures. Metaizeau involves closed reduction and application of intramedullary pin. Closed reduction and percutaneous intramedullary pinning for radial neck fracture in children is a less invasive procedure that respect soft tissue and minimizes neurovascular injury. It can provide good to excellent forearm and elbow functional outcome.

17. Patellar Tendon Augmentation with an Autologous Hamstring Graft: A Case Report

Anastasia Pranoto, MD, Edward A. Sarrosa, MD, FPOA
Department of Orthopaedics, Makati Medical Center

Introduction: Patellar tendon ruptures are injury commonly seen in patient under 40 years of age that caused by the forced flexion of the knee against eccentric loading. These ruptures usually occur at the inferior pole of the patella. We report a case of re-rupture post repaired patellar tendon. Hamstring graft is suitable graft because it is strong, native tissue, allows immediate mobilization post-surgery and easy to harvest graft which has low donor site morbidity. Additionally, studies have shown that harvesting the medial hamstrings leaves little functional deficit.

Case Report: A 42 year old male came after fell from the stairs and landed on his left knee while in flexion 3 weeks prior with previous history of patellar tendon rupture on the left knee and patellar tendon repair was done 6 years ago. He noted pain and was unable to ambulate after the injury. He also claimed unable to do straight leg raise and still with limitation range of motion since the first surgery. From physical examination noted minimal swelling, with tenderness on infrapatellar and range of motion noted from 0 - 45 degrees only. X-ray revealed his patella superiorly displaced, hence advised for surgery.

Conclusion: Surgical repair in patellar tendon rupture is needed to restore the extensor mechanism of the knee. A repair augmented with hamstrings does not require later removal and allow early ambulation. It also avoids major donor site morbidity. For these reasons this procedure is suitable for

the reconstruction of a patellar tendon rupture with poor quality of the remaining tendon or after failure of a previous repair.

Keywords: Patellar tendon, hamstring graft, augmentation

18. Arthroscopic Synovial Biopsy, Debridement, Synovectomy of Tuberculous Arthritis of the Right Elbow

Arvin Jonathan G. Arbas, MD, Carlo Angelo V. Borbon, MD, FPOA, Manuel V. Pecson, MD, FPOA
Department of Orthopaedics, Makati Medical Center

Introduction: Tuberculosis remains a major health issue worldwide. The latest value for Incidence of tuberculosis (per 100,000 people) in Philippines was 288.00 as of 2014. The incidence of Tuberculosis (TB) of elbow is 2-5% of all skeletal locations. Tuberculous arthritis of elbow is often misdiagnosed as degenerative arthritis or rheumatoid arthritis. The management options has been missing and severe complications due to this disease might also occur.

Our patient is a 33 year old female with a chief complaint of right elbow pain worse on flexion and extension. Patient self-medicated with pain relievers which provided temporary relief. Persistence of symptoms prompted consult to Rheumatologist. Steroid injection and Autologous Concentrated Plasma Injection were done which provided temporary relief. Persistence of more severe pain prompted consult with attending Orthopedic Surgeon. Physical exam showed swelling of right elbow with carrying angle valgus of 30 degrees, limited range of motion and tenderness was noted on the posterior of olecranon process and proximal ulna. Xray showed ulnar olecranon process cortical erosion with medullary mottled lucencies. MRI showed moderate joint effusion with synovial proliferation and capsular thickening, marrow edema in the rest of the olecranon, radial head, proximal ulnar and radial shafts and overall inflammatory arthropathy. Patient underwent arthroscopic synovial biopsy, debridement, synovectomy of right elbow. Histopathology showed Chronic Granulomatous Inflammation consistent with Pulmonary Tuberculosis. Postoperatively, patient was satisfied, relieved of pain and has full range of motion of right elbow, currently taking Anti-Kochs medication.

Conclusion: The lack of familiarity with tuberculosis in general, as well as specific signs and symptoms of extrapulmonary involvement may be contributory factors to a delay in diagnosis of atypical presentations. This case illustrates the high level of clinical suspicion needed for the early diagnosis of tuberculosis and proper treatment involving the bones and joints.

Keywords: Tuberculosis, Extrapulmonary Tuberculosis, Tuberculous Arthritis, Arthroscopy, Synovial Biopsy, Synovectomy, Chronic Granulomatous Inflammation, Arthritic Elbow, Joint Effusion, Capsular Thickening, Synovial Proliferation

19. Pediatric Cervical Neurofibromatosis treated with Anterior-Posterior Spinal Fusion

Catherine Marie R. Montalban, MD, Ana Rosario Sta. Ana, MD, FPOA, Jose Martin S. Paiso, MD, FPOA
Makati Medical Center

Neurofibromatosis (NF-1) with spinal involvement is a rare disease which can present as sharp angular scoliosis and/or kyphosis, small vertebrae due to erosion and dural ectasia and, on rarer instances, spinal cord compression.

We report on case of a 12 year old female with small stature (small bones), multiple café au lait spots, axillary freckling with a history of chronic progressive neck pain and left-sided upper extremity radicular pain. Radiographs demonstrating cervical kyphoscoliosis and cervical vertebral erosions. Magnetic Resonance Imaging demonstrated cervical intradural neurofibroma particularly at C7 to T1 level and plexiform type of extension from C4 to C7 anteriorly.

Anterior decompression C4 to T2 and resection of the cervical neurofibroma was performed followed by a non-instrumented autologous fibular strut graft from C3 toT3. Because of the small bone structure, stable instrumentation was not possible but a halo vest was initially applied. A second stage posterior instrumented fusion of C2 to T6 was planned for definitive stabilization.

The treatment was complicated by graft dislodgement and a delayed second stage, but after posterior spinal fusion was successfully performed using segmental instrumentation the patient's symptoms progressively improved.

An attempt was also done at the time of the second stage to restore anterior column support by reseating the dislodged anterior strut graft but was abandoned due to unusually severe scar formation.

The halo vest was extended for three months use.

In an article by Cheung in 2016, iatrogenic dysphagia may be caused by different factors, including strut graft dislodgement. In spite of this, the patient did not develop dysphagia, pain, or deformity recurrence on close monitoring, until posterior fusion was noted on latest follow up.

20. A Cost Utility Analysis between Conservative and Delayed Surgical Management of Tibial Shaft Fractures

Gaston Juan Pastor Roces M.D.
Philippine Orthopedic Center

Objective: To assess the cost utility between conservative management vs delayed surgical intervention of mid-shaft tibial fractures based on the research methodology put forth by the comparative study of Estillore Et Al.

Methodology: The sample population was asked to create costing diaries during their time in "illness" for 1 year. An EQ-5D questionnaire was given to each participant at the start of the illness, or index episode, and another after 1 year.

Results: Data showed a significant increase in costs with delayed management but with a better overall outcome and with a cost utility ratio of 21,782php/QALY. The conservative group had less favorable outcomes with a cost utility ratio of 10,367php/QALY at average.

Conclusion: Even though costs for the conservative management were significantly less, Quality of Life significantly decreased in this intervention. On the contrary, there was a significant improvement in the Quality of Life for the delayed intervention group at a significantly high cost. Delayed intervention, though costlier, provides a better outcome than the conservative group.

Keywords: QALY

21. Spinal Cord Compression Secondary to T6 Vertebrae Paraspinal Langerhans Cell Histiocytosis: a Case Report

Harris Kristanto, M.D. Jose Martin S. Paiso, M.D. FPOA, Ana Rosario P. Sta Ana, MD, FPOA
Department of Orthopaedics, Makati Medical Center

Introduction: Langerhans cell histiocytosis (LCH) is a clonal proliferative disease characterized by infiltration of single or multiple organs by specific dendritic cells that resemble the normal epidermal Langerhans cell. LCH is extremely rare in the spine of adults, but a few have been reported in the vertebral bodies of the thoracic, lumbar, and cervical spine. Clinical presentation of LCH is variable, ranging from a local pain to myelopathy for solitary lesions and even severe multivisceral involvement. There are no established guidelines for diagnosis and treatment of adult LCH.

Case Report: Patient is 65 years old male with chronic midback pain followed by rapid progressive weakness of both lower extremities and urinary incontinence. Upon consult, he was wheelchair borne with grade 1-2/5 motor strength of hip flexors distally. Sensory level was T6 with profoundly impaired sensation distally. Hyporeflexia of the lower extremities was noted and the patient had no anal wink. Bulbocavernous reflex was present.

Xrays of the thoracic spine showed a lytic collapse of the vertebral body of T6. MRI of the thoracic spine without contrast showed loss of vertebral height of T6 with hypertinense signal changes on T2 & STIR and hypointense changes on T1.

The patient was diagnosed to have a Pathologic fracture of T6 with spinal cord compression and an open biopsy of T6 through a left 6th rib thoracotomy with anterior decompression and rib strut grafting was planned.

Conclusion: Langerhans cell histiocytosis is usually found in children and therefore consider rare to occur in adult. Histopathological and immunohistochemical confirmation is mandatory in order to establish the diagnosis. No consensus exists for the optimal therapy for LCH. Conservative treatment is recommended for disease without neurological or mechanical complications. Operative hemicorpectomy or semitotal corpectomy is reserved to cases with neurological symptoms or deficits.

Keywords: Paraspinal, Cord compression, Histiocytosis, Langerhans cell histiocytosis

22. A Rare Case of Recurrent Extrapulmonary Tuberculosis of the Hand: A Case-Report

Jose Rodrigo G. Cervero, MD, Angel C. Gozum, MD, FPOA, Henry C. Carnero, MD, FPOA
Department of Orthopaedic Surgery, Makati Medical Center

Tuberculosis is a globally recognized burden which, in 2015, was estimated to have a total incidence of 322 per 100,000 in the local setting. Commonly, tuberculosis is an infection of the respiratory system spread by droplet transmission. Normal pathogenesis of extrapulmonary spread is by phagocytosis of macrophages, incomplete eradication by the immune response, and spread to extra-pulmonary locations via the lymphatic and circulatory systems.

Extra-pulmonary disease is estimated to occur in about 15% of patients with tuberculosis infection. Musculoskeletal tuberculosis is seen in 20% commonly affecting the spine, the hip and the knee.

Only 10% of musculoskeletal tuberculosis occurs in the hand and is usually a form of reactivation from latency.

We present a rare case of a 55 year old female, known to have Systemic Lupus Erythematosus (SLE) and maintained on oral Prednisone for more than 10 years, who initially consulted due to a soft-tissue mass on her right hand. Diagnostics done showed a soft-tissue lesion surrounding the head of the 3rd metacarpal with signs of bony involvement.

Incision biopsy of the lesion and curettage of the 3rd metacarpal was done revealing a granulomatous lesion with caseation consistent with Tuberculosis. The patient was started on a course of anti-tuberculosis medications and subsequently referred to an Infectious Disease specialist. In the interim, the patient was apparently well and asymptomatic however noted gradual recurrence of the mass on the right hand. After 3 weeks post-operatively, the patient underwent wound debridement and repeat curettage of the 3rd metacarpal with similar intra-operative findings as the index surgery. She is currently undergoing treatment for possible Multiple-Drug Resistant Tuberculosis (MDR-TB).

23. Madura Foot

Julian P. Ferrer, MD, Carlo V. Borbon, MD, FPOA
Department of Orthopaedic Surgery, Makati Medical Center

Introduction: Mycetoma or "Madura Foot," is a rare foot infection caused by Actinomycetes or Fungi. The Genera documented are Madurella, Phialophora, Pyrenochaeta, Aspergillus, Fusarium, Pseudallescheria, and Acremonium. It is seen in tropical regions where barefoot activity is common. The incidence in the Philippines has not yet been established due to its rarity. The pathogen infiltrates the skin from small puncture wounds, present as small, painless nodules, which then spread through the fascial plane and draining sinuses. It is characterized by sulphur granules in the drainage system. Chronic presentation would be a "scarred mass of deformed tissue."

Case Report: Our patient is a 45 year old male elevator installer, with lesions and swelling on the right foot. Four years prior to consult, patient had trauma to his right foot. Days later, there was swelling, emergence of skin-colored, pruritic plaques on the medial right foot. Constant scratching caused excoriations where Isopropyl alcohol was applied, providing some relief.
Interim shows local spread with increase in foot size, causing difficulty wearing his right shoe, but with burning sensation, and clear fluid discharge from excoriations.

Patient consulted with a General Surgeon, underwent Doppler ultrasound of the right leg which was unremarkable. He was prescribed Clindamycin, providing some improvement and referred to an Orthopaedic Surgeon.

Excoriations became weeping lesions. X-ray, bone scan, and MRI pointed to Madura Foot. Patient underwent incision biopsy and referred to Dermatology where Periodic Acid Schiff Stain was positive and Histopathology congruent with the diagnosis. Patient was started on Itraconazole and Cotrimoxazole. On follow-up, patient shows significant improvement.

Conclusion: Mycetoma or "Madura Foot," is a rare foot infection caused by a specific Genera of Fungi seen in tropical regions. Definitive diagnosis of which is a mixture of imaging, tissue biopsy, and special staining. Primary treatment is anti-fungal medication with regular follow-up as recurrence is high. Chronic and late stage infection may require debridement or even amputation.

24. Irreducible posterolateral dislocation of the knee – a Case Report

Michael John B. Pabalate, M.D., Manuel V. Pecson, M.D. FPOA
Department of Orthopaedics, Makati Medical Center, Makati City, Philippines

Irreducible posterolateral dislocations of the knee are rare lesions, generally caused by high-energy trauma inducing rotational stress and a posterior and lateral displacement of the tibia. In these conditions, the interposition of abundant soft tissue inside the enlarged medial joint space prevents spontaneous reduction or non-surgical treatment by manipulation of the dislocation. Surgical treatment is therefore necessary.

We report the clinical case of a 74 year-old male who suffered a dislocation of the right knee from a fall. Physical examination and ancillaries did not reveal any signs of vascular or nerve injury. Due to the irreducibility of the injury, open surgery was done in order to free the joint from the interposed joint capsule and soft tissue and repair the medial capsule-ligament lesions. Repair of the damaged cruciate ligaments was deferred, and will need reassessment upon follow-up if necessary if with persistence of joint instability.

25. Reconstruction of Proximal Humerus using Bone Cement with Shoulder Arthrodesis- A Palliative Treatment Approach for Metastatic Renal Cell Carcinoma of the proximal Humerus: a Case report and review

Rupesh Man Sherchan, MD, Ebenezer Francis O. Arthur, MD, Edward H.M. Wang, MD, FPOA
Department of Orthopaedics, Makati Medical Center, Makati City, Philippines

Objective: To present a case of a metastatic renal cell carcinoma of the left proximal humerus treated surgically for palliative purpose.

Methodology: A 62-year-old male presented to orthopaedic OPD clinic with chief complaints of left shoulder pain, intermittent, spontaneous, 7-9/10, radiating to the left arm, worse at night. Since onset (4 months) there was gradual loss of range in motion left shoulder. No trauma, fever, or other associated symptoms. Xray of the left shoulder and humerus revealed a lytic lesion with soft tissue mass over the head and neck of proximal humerus. Workup for metastasis was done with whole body bone scan, CT abdomen, CT chest which revealed left renal mass with vari sized pulmonary nodules scattered in both lungs suggestive of metastatic renal cell carcinoma. Patient was co-managed with Oncology, Urosurgery, Intervention Radiology.

Patient underwent left sided radical nephrectomy with biopsy, which concluded our diagnosis Renal cell carcinoma.

1 month post radical nephrectomy, patient followed up and embolization for tumor devascularization was performed.

Surgery was proceeded with extended deltopectoral approach of the left shoulder extending to the posterior surface of the spine of the scapula. Marginal excisional biopsy of the proximal humerus and reconstruction with bone cement and left shoulder arthodesis with plates and screws was done.

Results: Clinical picture improved pain with scapulothoracic movement. Undergoing radiotherapy.

Conclusion: Improvement of quality of life with pain relief and functional upper limb is pivotal to a patients' independence, therefore, preserving limb function is a major goal of treatment.

Keywords: proximal humerus, metastatic tumor, shoulder arthrodesis.

26. Orthopedic Education in the Philippines: State of the Art and a Proposal

Jeanne Pierre F. Leung
Philippine Board of Orthopaedics

With the growing field and scope of Orthopaedics in the country today, there is an increasing need to coordinate and harmonize efforts in Orthopaedic education. This harmonization is fueled by both the ASEAN integration and requirements of the Professional Regulatory Commission to upgrade our standards

27. Philippine Orthopedic Manpower Updates 2015-2016

Jean Pierre F. Leung
Philippine Board of Orthopaedics

As the organization tasked with accreditation of training programs and certification of Orthopedic Surgeons in the country since 1972, it is imperative that the PBO be updated in the manpower status of Orthopedic Surgeons in the nation.

Objectives:
• What is the state of our country's orthopedic manpower in 2015/16?
• How many Orthopedic Surgeons do we have and where are they practicing?
• To correlate this with the number and distribution of Orthopedic Training Programs and Residents in the Country
• To compare our population density with that of other countries

Methodology: We determined the number of POA Fellows and their place of practice from the POA Database/Directory, and the number of Training programs and residents from the PBO Database. Philippine population statistics were obtained from the Philippine Statistics Office Website. Orthopedic surgeon density of other countries were obtained from the ASEAN Orthopedic Association Secretariat and the countries respective Orthopedic Associations and/or SICOT website.

Results: The total number of POA Fellows (end of 2015 including new inductees) was 685. The estimated Philippine Population for the same year-2015 was 102,965,300. This places our Orthopedic Surgeon Density at 0.66 /100,000 Filipinos. Comparing this figure with countries we see that our relative orthopedic surgeon density is low.

28. The Objective Structured Clinical Examination (OSCE) as an Assessment Tool in Orthopedic Residency: An Examiner's And Examinee's Perspective

William T. Lavadia, MD and Deanne Carla N. De Mesa, MD

Objective: The study aims to investigate the perspectives and readiness of both the Consultant Orthopedic Surgeons and Residents as to how they see the OSCE as an assessment tool.
Methods: A total of 14 Orthopedic Surgeons and 15 2nd to 4th year Orthopedic Residents from The

POC participated. A questionnaire investigating the perspectives and readiness of each group was constructed by the authors followed by a focused group discussion (FGD) with the residents was subsequently done to gather more insight.

Results: Fourteen out of the 15 Residents (14/15 or 93.33%) perceive that the OSCE will be helpful in gauging their clinical competence that will facilitate the recognition of their strengths and weaknesses and will be an objective basis for assessment. Eight out of the 14 (8/14 or 57%) Consultants have a high level of confidence in implementing the OSCE and helpful in assessing the residents' communication skills, history taking, physical examination, diagnostic test interpretation, clinical reasoning and basic psychomotor skills.

Conclusion: Both the Consultants and Residents perceive that the OSCE will be a good tool to assess the trainee's competence and clinical skills. The perceptions of the orthopedic consultants and residents from the other major training institutions may be further investigated to determine whether there are varying or similar perceptions.

29. The Use of the Objective Structured Clinical Examination (OSCE) in Orthopedic Residency - Initial Experience at the Philippine Orthopedic Center

William T. Lavadia, MD

Objective: The OSCE was implemented to investigate the usage and applicability of this assessment tool within the Section of Adult Orthopedics.

Methods: A pre- and post-OSCE questionnaire was implemented for both the Examiner and Examinee. The pre-OSCE questionnaire for the Examiner was to see their perspectives if the OSCE will be a helpful tool in assessing the trainee's competency in Communication Skills, History-taking and Physical Examination Skills, Interpretation of Diagnostic Tests, Clinical Reasoning and Psychomotor Skills using a 5-point Likert Scale. The same set of questions were asked in the post-test including open-ended questions as to what went well and what can be done differently next time.

The OSCE was conducted in 16 Stations and covered the different subspecialties of Adult Orthopedics.

Results: 7 Consultants and 2 Fellows acting as Examiners, 15 Senior Residents as Examinees and 4 First Year Residents as Standardized Patients participated. Most of the Residents stated that this gave them a good idea as to what they know and don't know and what they need to focus on more. They were unanimous that it will help them for the Oral Diplomate Exams. The Consultants agree that it is a more direct and objective assessment of what the examinee knows, showing what they can do.

Conclusion: The OSCE was deemed to be useful, relevant and applicable in improving the training program.

30. Proximal Femoral Focal Deficiency (PFFD) in a newborn- A Case Report

Bernardo, Peter B. FPOA
Department of Orthopedics, UP-Philippine General Hospital

This is a case of a newborn female born to a 38 G3P2 via Caesarian section at San Juan De Dios Hospital, 39 weeks AOG. On PE, there is note of considerable shortening and deformity of the left

lower extremity compared to the Right. There was marked laxity of the knee with deformity of the tibia. There was note of a lobster hand of the Right and missed toe of the left foot. On baby gram X-ray showed femur is short with lateral bowing of the proximal third, congenital absence of the fibula, shortening and deformity of the tibia, absence of metatarsal of the left foot with missing 2nd toe. The right hand showed absence of metacarpals and missing digits.

31. Posterior elbow dislocation with associated fracture of the Radial Shaft- A Case Report

Bernardo, Peter B. FPOA
Department of Orthopedics, UP-Philippine General Hospital

This is an unusual case of a 52/M who fell from a height of 4 ft and landed on his left elbow and forearm. There was note of deformity and swelling of the elbow and proximal forearm, with limitation of motion. X-rays showed a posterior dislocation of the ulna at the elbow with associated fracture of the proximal radial shaft. Closed reduction of the humeroulnar dislocation was done and plating of the radial shaft fracture was done. At 7 months ff-up, there was good functional motion of the elbow.

32. Pneumohemothorax 2 to Isolated midshaft clavicular fracture; A Case Report

Bernardo, Peter B. FPOA, Almeda, Jan Anthony – 3rd yr Resident SJDEFI
Department of Orthopedics, UP-Philippine General Hospital

Clavicular fractures are ususally seen at the emergency department. However, its, complications, especially, pneumohemothorax are rare occurrences. A 44/M motorcycle driver was brought to the ER after hitting a hump at moderate speed causing him to lose control and thrown out of the motorcycle hitting his left shoulder at the pavement and rolled over sustaining abrasions, and pain over the left shoulder and dyspnea. On PE, there was note of abrasions left facial area, [+] deformity of left clavicular area [+] Limited ROM, decreased breath sounds left lung, decreased vocal fremitus left. Chest xray was done revealing pneumothorax left, clavicular fracture closed complete displaced midshaft. Pt underwent closed tube thoracostomy, and was admitted for observation. The clavicular fracture was managed conservatively. He was discharged after 7 days uneventful.

33. "MASKED" – A case of Harlequin Icthyosis

Bernardo, Peter B. FPOA, Cotas, Paola Ysabel MD 1st yr Resident Pediatrics SJDEFI, Feliciano, Christian Mico Md 2nd yr Resident SJDEFI
Department of Orthopedics, UP-Philippine General Hospital

Harlequin Icthyosis is a disorder caused by mutations in the lipid transporter adenosine triphosphate binding cassette A12 [ABCA12gene]. This gene provides instructions for making a protein known as ATP-binding cassette [ABC] transporter, which plays a major role in transporting lipids in cells that make up the epidermis. This lipid transport is essential for normal development of the skin. Rev Oliver Hart documented the first case in April 5, 1750. Incidence is 1 in 300,000 live births. Abnormalities causes increased transepidermal water loss resulting in [1] increased metabolic demand [2] risk for hypernatremic dehydration, [3] temperature dysregulation [4] increased accumulation of stratum corneum. We present a case of L.A. a newborn female born preterm at 33 weeks to a 19 yo G1P0 via nsvd, APGAR score 8, amniotic fluid clear, birth weight of 1820 grams. Markedly evident was thickened skin with large plates of hyperkeratotic scaling and fissures of appendages. Scalp has large diamond shaped plates separated by fissures, ectropion of both eyes; eclabium of the lips. Bilateral ears poorly developed with absent pinnae. Cyanotic appendages with hypoplasia of fingers and toes.

Noted joint contraction of the elbows knees and fingers. Pt was seen by different specialties, pediatric neonatology, genetics, orthopedics, ophtha, dermatology, and otolaryngology.

34. Is Giant Cell Tumor of the Small Bone of the Foot more Aggressive than Giant Cell Tumor at other Skeletal Sites?

Hannah Co MD and Edward Wang MD MSc
Department of Orthopedics, UP-Philippine General Hospital

Aims: This study aims to determine whether giant cell tumor of bone of the foot (GCTB-F) is more aggressive than GCTB at other sites using data from a single institution.

Patients and Methods: We reviewed all patients with GCTB seen by our Unit from 1993-2012. Patients with GCTB-F were compared with all other patients with GCTB in terms of demographics and presentation. This group of GCTB-F was then compared with patients with GCTB of the appendicular skeleton (GCTB-AS) in terms of treatment and oncologic outcome at follow-up of at least 2 years.

Results and Conclusion: There were 7 patients with GCTB-F (2.6%), most consulted over 12 months after symptoms. Compared to other GCTB (n=262), a bigger proportion of patients (28.5%) presented as recurrent lesions. All 7 patients were classified as Campanacci III but none had lung metastasis at presentation or on follow-up. Compared to the group of 124 GCTB-AS, no GCTB-F patient received intralesional surgery. The 14% recurrence rate can be explained by contaminated non-intralesional surgery due to the advanced presentation and the technically challenging architecture of the foot. It would seem the aggressive tag of GCTB-F is not due to aggressive biologic behavior, but to a combination of delayed presentation, delayed diagnosis and difficult surgery.

35. Characteristics of Patients with Spinal Tuberculosis: A Three-Year Experience from years 2012-2014 (A Descriptive Study)

Pocholo Inigo Morales, Jose Miguel F. Ignacio
Department of Orthopedics, UP-Philippine General Hospital

This is a Descriptive study of 17 patients, diagnosed with Pott's disease and admitted in the Hospital in 2012, 2013 and 2014. Data had been gathered through patient records and the Department of Orthopedics database and were analyzed: All patients presented with progressive weakness of extremities and typical clinical presentations (most with low back pain), and all had a typical x-ray and/or MRI picture. The mean delay in treatment was 105 days, and the mean delay between onset of symptoms and surgery was 136.5 days. One level of spinal involvement was found in 3 patients (18%). Two level involvement were seen in 11 (61%), whereas three or more than three levels were seen in only 3 (17%). Thoracic vertebrae (T1-T10) were most commonly involved (n=11 or 61%) followed by thoracolumbar (T11-L2) (n=4 or 24%). Most patients were AIS D (n=6 33%). All were surgically treated. Most common procedure (n=10 56%) was Anterior decompression debridement fusion using rib grafts, followed by all-posterior decompression and pedicle screw fixation and inter-body fusion with mesh cage and bone graft (n=5 28%). All patients whose follow up records were available had complete improvement of symptoms to AIS E by 6 months post op, and all who were seen 1 year post op sustained their recovery, maintaining their brace for an average duration of 1 year and having completed their Anti-Koch's treatment for 1 year.

36. Case Series: Factors for Revision Hip Arthroplasty

Vincent Ryan Ang, Gregorio MS Azores
Department of Orthopedics, UP-Philippine General Hospital

Primary hip arthroplasty is a cost effective and highly effective procedure for the treatment of osteoarthritis of the hip. It has been around since the 1960s and is now one of the most common procedures performed by Orthopedic surgeons around the world. The number of hip arthroplasty procedures is steadily increasing through the decade. Although the results of hip arthroplasty are generally excellent, some constructs eventually fail. In many such cases necessitating revision surgery. Revision surgery is a complex, traumatic and far more expensive surgery as compared to primary total hip arthroplasty. This procedure entails more operative time, more blood loss and there is a higher incidence of morbidities such as infection thromboembolism, dislocation, nerve palsy, perforation and fracture of the femur are just some of the complications encountered. The causes of revision hip arthroplasty may be stratified into patient-related factors, implant-related factors and failures related to inadequate surgical technique or a combination of the above. These risk factors are important to identify in the revision of failed primary hip arthroplasty.

37. Pedicled Patellar Reconstruction: A Salvage Procedure for Recurrent Giant Cell Tumor after Intralesional Currettage: A Case Report

H. Palad II, P. Syson, J.A. Duenas, R. Rotor, R. Claudio
Philippine Orthopedic Center

Extended intralesional curettage is the gold standard treatment for unicondylar Giant Cell Tumors (GCT) of the distal femur.6 However, this procedure has 10-40% recurrence rate.6 There are numerous options for restoring joint continuity and function after resection of any articulating segments of the knee. Most commonly employed procedures are constrained endoprosthetic replacement, allograft reconstruction, and knee arthrodesis. Despite the proven efficacy of these options, their utility is limited by the cost and availability of prosthetic implants and well-matched allograft bone, as well as the need to sacrifice more tissue than is actually involved by tumor.3 5 Here, we present an alternative treatment option for recurrent GCT after extended intralesional curettage for patients that presents with intra-articular extension.

This is a case of RG, 39M, construction worker, with complaints of persistent left knee pain. He was first diagnosed as a case of GCT of distal femur where on the same year, the patient underwent extended curettage using phenol and application of bone cement for reconstruction of the lateral condyle. Two position screws were used for skeletal stability augmentation. Patient was apparently well up until three years post-surgery when he presented with pain and radiograph showed progressive lysis of subchondral bone. Patient subsequently underwent extended curettage and used the patella for reconstruction of joint surface.

The Pedicled Patellar Reconstruction is a unique joint-sparing method of treating peri and intra-articular unicondylar bone tumors. It may be used as a cost effective salvage procedure for recurrent GCT after an extended intralesional curettage. The outcome can be attributed to the reliability of autologous bone grafts as reconstructive material, the preserved blood supply of the patella, and utilization of double fibular struts for support.

38. Translation and Validation of a Filipino Version of the Activity Scale for Kids Questionnaire

Michael Thomas T. Gonzales, Richard S. Rotor
Philippine Orthopedic Center

The Activity Scale for Kids performance (ASKp) version is a disability measure for the pediatric populations. It is a 30-item questionnaire is targeted to patients aged 5-15years. No Filipino translation and validation has been done yet of this questionnaire.

The translation of the ASKp was done based on the kidscreen protocol where 2 forward translations were collaborated into a reconciled translation, then back translated to English. A final forward translation was done. The translations were done by the author and persons with appropriate background.

The final translation was tested with 10 children of the target population and was found to be similar to the original statistically with a Pearson's r of 0.960. It was also noted that most of the children preferred the Filipino version of the questionnaire. Pre testing was done to 200 children from 3 different schools in Metro Manila. The answers of the children were internally consistent with an acceptable Cronbach's alpha score of 0.818. However, the average scores of the children were lower than that of the average scores according to literature. This was attributed to cultural differences between the groups.

The translation done was found to be similar to the original and was validated to be appropriate for use in the Filipino setting.

Keywords: ASKp, Translation, Validation, Filipino, Pediatric, Disability Measure

39. An Observational Study of Patient Outcomes in a Local Hospital for Surgical Decompression after 48 Hours of Onset Of Cauda Equina Syndrome

Alberto Gabriel D. Zetasate
Institute of Orthopedics & Sports Medicine, St. Luke's Medical Center

This study aims to present local data of patients with cauda equina syndrome secondary to degenerative intervertebral disc herniation for which surgical decompression was performed more than 48 hours after onset of symptoms. Four patients with a mean age of 55 years (two males and two females) underwent surgical decompression from as early as three days to as late as four weeks. Of the four patients who responded via phone interview, recovery was reported in all patients from as early as less than 24 hours to as late as two weeks. Early surgical decompression appeared to correlate with earlier recovery from symptoms; however, the small study population cannot show statistical significance. Still, surgical decompression is recommended for all patients with cauda equina syndrome regardless of delay in diagnosis. Education of allied health professionals should help in recognizing the clinical presentation of cauda equina syndrome and improve early consult-seeking behavior.

40. Functional Outcome of Elderly Patients with Unstable Intertrochanteric Fractures Treated with Hemiarthroplasty Using Calcar Replacing Implants from 2013 to 2015 in a Single Tertiary Institution

Mark Gerard N. Limbo
Institute of Orthopedics & Sports Medicine, St. Luke's Medical Center

Proximal femur and hip fractures are relatively common injuries in the elderly, patients older than 65 years old. Several epidemiological studies have suggested that these types of fractures are increasing due to the general life expectancy of the population has increased significantly during the past few years. More than 280,000 hip fractures occur in the United States yearly and the incidence is expected to double by the year 2050. These fractures are also a cause of substantial morbidity and mortality due to the effects of prolonged immobilization. They occur in the elderly population as a result of only minimal or moderate trauma. Due to their advanced age and their associated co-morbidities they suffer drastically in terms of function. Hence the need to treat these fractures is given utmost importance, if condition permits. To date there are a lot of treatment options to choose from, which includes primary bone fixation as well as arthroplasty, which will be dependent of the character of the fracture, bone quality and other factors, for which the common goal is to bring back the pre injured state of the patient or at least prevent the complications associated with prolonged recumbency or immobility such as pulmonary complications, deep vein thrombosis (DVT) and pressures sores to name a few. The aim of the study is to evaluate the functional results as well as complications associated with operative management of unstable intertrocharic fractures by hemiarthroplasty using calcar replacing implants.

41. Anterior Odontoid Screw Fixation: Case Series with Medium Term Follow Up

Anthony Regalado
Department of Orthopedics, The Medical City

This is a case series of 3 patients who underwent anterior odontoid screw fixation for Type II odontoid fractures; medium-term outcomes are discussed.

42. A Rare Case of Multicentric Metachronous Myxoid Liposarcoma

Abigail R. Tud, MD-MBA; Rafael S. Claudio, MD-MBAH
Department of Orthopedics, The Medical City

Liposarcomas are the second most common type of soft tissue sarcoma in adults, typically presenting as a single, well-circumscribed mass affecting the lower extremity. While local recurrence and metastases are not uncommon, multicentricity for liposarcomas particularly of low to intermediate histologic subtypes is rare. Less than 50 cases have been reported in literature since it was first identified in the 1940s.

We present the case of a 59 year-old male with a huge tumor affecting the right posterior thigh, and a concomitant mass on the left arm. The lesions occurred eleven years apart, with no signs of chest or abdominal metastasis at the time of consult. After wide resection, histopathologic analysis revealed findings consistent with myxoid liposarcoma for both tumors. No evidence of recurrence has been detected 1 year post-surgery.

Multicentric liposarcoma is an unusual presentation for a common type of soft tissue sarcoma, with a potentially more aggressive clinical course and poorer prognosis. Confirming the diagnosis remains a challenge due to varied reports regarding chronicity, differentiating between metastases versus multicentricity, and the overall rarity of this condition.

Keywords: metachronous liposarcoma; multicentric liposarcoma; myxoid liposarcoma; recurrent liposarcoma

43. A Comparison of Complication Rates between Early and Delayed Surgery among Patients with Fragility Fractures of the Hip

Abigail Tud, Rafael S. Claudio, Carlo Emmanuel J. Sumpaico
Department of Orthopedics, The Medical City

Background: Existing standards of care recommend surgical management for fragility fractures of the hip. A lack of consensus remains however, with regard to timing of surgery. Early intervention has been associated with lower incidence of morbidity and mortality, despite conflicting reports. We sought to determine the effects of surgical timing on in-hospital complications among patients with fragility hip fractures.

Methods: All patients admitted to a tertiary-care facility for fragility fractures of the hip from 2014-2016 were analyzed retrospectively. Subjects treated within 72 hours were grouped under "early intervention", while those managed beyond were designated as "delayed intervention". Primary outcomes measured were incidence of complications during admission, while secondary outcome was length of hospital stay.

Results: A total of 96 patients met our inclusion criteria, of which 41 (42.71%) underwent surgery within 72 hours. Both groups were found to have comparable baseline characteristics. Results showed a significantly lower incidence of pressure ulcers (2.4% for ≤72 hours versus 45.5%; p=<0.0001), pneumonia (7.32% for ≤72 hours versus 47.27%; p=<0.0001) and urinary tract infection (4.88% for ≤72 hours versus 40%; p=<0.0001), as well as shorter hospital stay (mean: 8.85 days ± 5.4 for ≤72 hours vs 14.6 days ± 13.3; p=0.01) in the early intervention group. More cases of documented deep vein thrombosis were recorded in the delayed intervention group (83.3% versus 16.6%), as was the only case of in-hospital mortality.

Conclusion: Early intervention showed a significantly lower incidence of in-hospital complications among patients with fragility fractures of the hip. Our findings suggest that surgery within 72 hours may lead to better outcomes by reducing the incidence of pressure sores, pneumonia, and urinary tract infection among hip fracture patients, while reducing length of admission.

Keywords: fragility fracture, hip fracture, early intervention, in-hospital complications

44. Surgical Management of Dysphagia secondary to Diffuse Idiopathic Skeletal Hyperostosis: A Case Report and Review of Literature

Anthony Regalado
Department of Orthopedics, The Medical City

This is a case of a 58-year old female diagnosed with dysphagia secondary to Diffuse Idiopathic Skeletal Hyperostosis; a case report and review of literature are discussed.

45. A Descriptive Study on Sports-Related Knee Injuries in a Tertiary Hospital in Metro Manila: A Pilot Study

Armand Bryan D. Sutingco MD MBA1, Carlo Emmanuel J. Sumpaico MD2*
The Medical City

The knee is one of the most commonly injured joint in the body due to its anatomical structure, exposure to external forces, and stresses applied to it. The most common knee injuries seen are anterior cruciate ligament injuries and meniscal injuries. The general objective of this study is to describe the circumstances surrounding sports related knee injuries. A survey questionnaire was utilized to gather data which was then collated and analyzed using Microsoft Excel. It was found in the survey that increased age, male sex, higher BMI, increased level of competitiveness during play, cement and wood playing surfaces, and a low cut shoe wear have a higher incidence of knee injury rates. Meanwhile, a higher skill level was shown to have a lower incidence of knee injuries.

Keywords: risk factors; knee injuries; Filipinos

46. A Comparative Study on the Accuracy of Magnetic Resonance Imaging in Detecting ACL and Meniscal Tears of the Knee The Medical City

Ken Jeffrey O. Magcalas, Rafael S Claudio, Carlo Emmanuel Sumpaico, Jose Eduardo D. Legarda, Romelito Jose G. Galcim
Department of Orthopedics, The Medical City

Magnetic Resonance Imaging is a proven non-invasive diagnostic tool in detecting different knee pathologies. In several published studies, the specificity and sensitivity of MRI in detecting various knee pathologies ranges from 80-90%. This study aims to determine the accuracy, specificity, and sensitivity of MRI done in a single tertiary hospital in the Philippines by correlating it with the intra-operative findings seen during knee arthroscopy. A total of 111 patients who had knee arthroscopy and knee MRI done from 2014 to 2016 were included. On analysis, 63 patients were arthroscopically proven to have anterior cruciate ligament (ACL) tears with meniscal tears and 48 patients had isolated meniscal tears. Accuracy was calculated at 92.8% for ACL tears (sensitivity of 93% {CI 95%: 84% to 99%}, Specificity of 92% {CI: 81% to 98%}), 65% for ACL with lateral meniscal tears (sensitivity of 50% {CI 95%: 44% to 92%}, specificity of 71.1% {CI 95%: 57% to 86%}), 74.2% for ACL with medial meniscal tears (Sensitivity of 46% {CI 95%: 71% to 100%}, Specificity of 81.6% {CI 95%: 50% to 90%}), 72.9% for medial meniscal tears (Sensitivity of 73% {CI 95%: 61% to 93%}, Specificity 72.7% {CI 95%: 45% to 86%}) , and 81% for lateral meniscal tears (Sensitivity of 61.5% {CI 95%: 44% to 92%}, Specificity of 88.6% {CI 95%: 71% to 96%}). This study showed that knee MRI has higher accuracy in detecting isolated knee pathologies compared to ACL with concomitant meniscal injury.

Keywords: ACL tear; Meniscal tear; Knee MRI

47. Pulmonary Cryptoccoccosis Presenting as Subcutaneous Suprapatellar Soft Tissue Mass: A Case Report

Rina Therese R. Madelar, MD-MBA 1, Rafael S. Claudio, MD, FPOA, MBAH2*
Department of Orthopedics, The Medical City

Cryptococcosis presents mainly in the central nervous system followed by the pulmonary system, although there have been a few cases of cutaneous and subcutaneous affectation. We present the case of a previously healthy 57-year old male with recurrent subcutaneous suprapatellar mass on the right.

Further work up was done for which pulmonary nodules were seen and the patient was diagnosed with common variable immunodeficiency disease. The patient was started on anti-fungals and is currently being closely monitored. The largest of the pulmonary nodules was seen to have slightly decreased in size upon completion of antibiotic therapy.

48. Midfoot Approach to Surgical Correction of Checkrein Deformity - A Case Report

Anne Marie M. Milo, MD, John Hubert C. Pua, MD, FPOA
Department of Orthopaedics, University of Santo Tomas Hospital

Purpose: With only limited cases of checkrein deformity, this paper aims to report a similar case using a midfoot approach and to present the approach in a stepwise manner.

Dynamic flexion deformity of the hallux or otherwise known as checkrein deformity is a rare complication of lower limb fractures. This may be attributed to tethering of the muscle or the tendon at the site of fracture. Some reported subclinical compartment syndrome of the deep compartment of the leg as a possible cause of this occurrence. Different techniques were done, all of which showed its own advantage and disadvantages. By far, the midfoot approach showed good outcomes with no reported recurrence. However, due to limited cases, it has not yet been established as the best approach to treatment.

Conclusion: Despite limited available cases due to rare occurrence of this deformity, a midfoot approach may be a superior technique compared to other approaches as backed up by similar literatures.

Keywords: Checkrein deformity, Tibial shaft fractures, Dynamic claw toe deformity, Flexion deformity of the hallux

49. A Case Report of a Genu Recurvatum Deformity in a 23 Year Old Treated with Proximal Tibial Open Wedge Osteotomy

Ervin Chino N. Tayag, MD, Carmelo L. Braganza, MD, FPOA
Department of Orthopaedics, University of Santo Tomas Hospital

Fractures to the proximal tibial physis are uncommon epiphyseal injuries. We present a case of genu recurvatum deformity in a 23-year-old female who sustained a fracture of the proximal tibial physis 15 years prior. Patient was managed nonoperatively up until a genu recurvatum deformity was detected associated with significant restriction of knee flexion and limb length discrepancy (2 cm) as well as medial and posterior instability of the joint. The deformity was treated with a proximal tibial open wedge osteotomy with autograft reconstruction and buttress plate fixation. One year after surgery, the patient gained functional knee mobility without clinical instability. This case highlights the rarity of the case & technique done to address the deformity.

Keywords: Genu Recurvatum, Tibial Physis Fracture, Treatment, Case report

50. Can a Vascularized Osteoseptocutaneous Flap Survive Without Venous Anastomosis? - A Case Report

Francis Martin F. Rodas, MD, Nelson T. Lim, MD, FPOA
Department of Orthopaedics, University of Santo Tomas Hospital

ASP, is a 59 year old male who sustained an open fracture of the right distal tibia with concomitant comminuted fracture of the fibula, soft tissue and skin defect following a fall from three floors. The patient initially underwent wound debridement and application of a delta frame external fixator. However, the patient soon developed osteomyelitis of the tibia. Serial debridement, removal of infected bone and soft tissue and eventual reconstruction of the tibia using a vascularized fibular osteoseptocutaneous flap taken from the contralateral leg was done. However, within 48 hours, congestion was noted on the microsurgically transferred flap. Exploration of the recipient site was done. The arterial anastomosis (Peroneal artery to Posterior Tibial artery) was intact with good flow. The entire peroneal vena comitantes of the fibula to the venous anastomosis on the recipient site were noted to be thrombosed. The skin paddle initially turned dusky but later on returned to pinkish color with cherry red bleeding upon needling. Five months after the operation, all wounds have closed. The skin paddle survived with no signs of infection. Consolidation and fusion were noted on both ends of the fibular graft and the external fixator was subsequently removed. At 17 months follow up, repeat radiographs showed fracture union and hypertrophy of the fibular graft on the tibia and talus. The patient was able to ambulate with full weight bearing, without use of any assistive device and was able to resume full, regular activities.

Key Words: vascularized fibular osteoseptocutaneous flap, venous congestion, flap survival

51. Limb Salvage and Management of Chondrosarcoma of the Tibial Diaphysis using a Non-Vascularized Fibular Strut Graft - A Case Report

Gabriel Alfonso B. Javier, MD, Charles Abraham C. Villamin, MD, FPOA
Department of Orthopaedics, University of Santo Tomas Hospital

Nowadays, limb salvage surgery has become the treatment option for bone tumors without losing the limb. With recent improvements of imaging modalities, surgical techniques and effective chemotherapy, amputation has clearly fallen out of favor when treating sarcomas.

We presented a case of RAC, a 66 y/o female who was diagnosed with chondrosarcoma of the right proximal-middle tibial diaphysis. The patient underwent wide resection of tibial mass with an 8cm bone defect noted. A non-vascularized fibular strut graft was harvested from the ipsilateral extremity and was placed through the intramedullary canal of the tibia. We used a 12-hole locking plate and screws for fixation of the strut graft. Post-operative radiographs showed an acceptable alignment of the strut graft with stable fixation provided by the plate and screws. The patient is now ambulatory without any assistive device, she is pain free and has no complications. Plain radiographs showed bony union, acceptable alignment and stable fixation at 9 months post-op.

The management strategies for these types of cases must take into account the size of the tumor, location, potential bone loss/defect, soft tissue coverage, and the general health and expectations of the patient. The strategy of doing a wide resection of a sarcoma with application of a free non-vascularized fibular graft with fixation using locking plate and screws showed satisfactory radiographic evidence of union and an acceptable clinical functional outcome. This case was the first of its kind in

our institution and it clearly showed us that it is a viable option provided that proper pre-operative planning is done.

Keywords: limb salvage surgery, chondrosarcoma, non-vascularized fibular strut graft

52. A Retrospective Analysis of the Femoral Intercondylar Notch Width Index in Patients with and Without Anterior Cruciate Ligament Tear

Gabriel Alfonso B. Javier, MD, Alberto Ma. V. Molano, MD, FPOA
Department of Orthopaedics, University of Santo Tomas Hospital

Backround: The anterior cruciate ligament (ACL) is one of the most frequently injured structures of the knee joint therefore it is important to find ways to predict the risk of ACL injury and consequently to prevent injury to the ACL. It has been proposed that a narrow intercondylar notch predisposes to ACL injury. The use of notch width index (NWI) eliminates magnification variability and difference in patient body size and stature. It is calculated by taking the ratio of notch width to the bicondylar distance, the normal value is from 0.21 to 0.35. In our study, we performed a retrospective analysis of the knee MRI of patients to investigate if a narrow intercondylar notch width index is associated with an ACL tear.

Methods: 154 patients with an MRI of the knee (done at the USTH) were screened and reviewed. The patients with normal knee (no ACL tear) who underwent knee arthroscopy are classified as the control group (Group A) while the patients with partial or complete anterior cruciate ligament tear who underwent arthroscopic ACL reconstruction was classified as the experimental group (Group B). The mean intercondylar notch width index of both groups was compared using Student's t test for statistical analysis.
Results: Since p-value is 0.5269. We found no significant difference in the mean notch width index between the control and experimental groups.

Conclusion: We did not find a relationship between narrow intercondylar notch width index and ACL tears and there is no need for MRI to predict the probability of ACL injury.

Key words: Anterior cruciate ligament tear, Intercondylar notch width index, Intercondylar notch, MRI, knee arthroscopy, arthroscopic ACL reconstruction

53. Chronic Achilles Tendon Rupture Reconstruction Using Hamstring and Plantaris Tendon Autograft - A Case Report

Gino Francis F. Baylon, MD, Carmelo L. Braganza, MD, FPOA
Department of Orthopaedics, University of Santo Tomas Hospital

Achilles tendon injury can be be seen in both athletes and in sedentary patients or in those who are episodic athletes known as "weekend warriors" It is often misdiagnosed as an ankle sprain and may be missed in up to 25%. Achilles tendon injury can be defined as acute or chronic depending on the presentation from the onset of injury.
Chronic Achilles tendon injury is defined as those presenting with more than 4 weeks after the initial injury. Chronic Achilles tendon ruptures should be treated operatively unless there are significant contraindications to surgery. If left untreated, the thickened sheath becomes adherent to the tendon and will cause impairment. The choice of management is based on the size of the tendon defect with the surgical management being the more favorable option. There are several ways that can be

utilized to reconstruct the tear. Comparison of different surgical techniques is difficult, due to several studies involved being retrospective and generally small.

The need for augmentation of Achilles tendon ruptures was introduced in 1953 with the use of different autologous materials such as gastrocnemius-soleus V-Y plasty and turn-down of proximal Achilles tendon. In large defects, end-to-end repair is not possible and V-Y plasty may not be sufficient. This is where tendon transfers may be indicated.

For this case, we chose to use hamstring tendons to reconstruct chronic rupture of the Achilles tendon in the present case. Hamstring tendons are currently used as a free graft for anterior cruciate ligament reconstruction because of the low risk of donor site morbidity, fast recovery, and easy harvest. Moreover, they are relatively long tendons, enabling reconstruction of Achilles tendon continuity, even in cases of chronic rupture with a wide gap between the stumps.

54. Arthroscopic Repair of a Circumferential Labral Lesion - A Case Report

John Roland P. Uy, MD, Raymond Y. Nuñez, MD, FPOA
Department of Orthopaedics, University of Santo Tomas Hospital

Symptomatic pan-labral or circumferential tears of the glenohumeral labrum are an uncommon yet extensive injury of the glenohumeral joint that may result in recurrent instability and pain. With the evolution of arthroscopy, complex lesions of the glenoid labrum have been increasingly recognized as part of the shoulder instability spectrum. Recognizing these lesions and being prepared to treat them surgically can be challenging even to the experienced Orthopaedic surgeon. Arthroscopic repair of the circumferential labral tear has been shown to successfully re-establish stability and decrease shoulder pain, allowing a return to preinjury activity in most patients. Little is known of the specific complications of this procedure because few cases have been reported to date. The presence of combined labral lesions is being noted at an increasing rate as shoulder arthroscopy replaces open approaches in the management of glenohumeral instability. The shoulder surgeons need to have a high index of suspicion for the presence of combined instability patterns and combined lesions on imaging and at arthroscopy. This case report focused on the recognition, surgical treatment, and clinical outcomes of a circumferential labral tear.

Keywords: recurrent shoulder dislocation, pan-labral tear, circumferential tear

55. Limb Salvage Procedure for Osteosarcoma - A Case Report

Martin Louie S. Bangcoy, MD, Charles Abraham C. Villamin, MD, FPOA
Department of Orthopaedics, University of Santo Tomas Hospital

Historically, limb salvage surgery in patients with osteosarcoma was only limited to patients with a small tumor and for lesions that did not involve or had minimal cortical extensions. Majority of the patients were treated by amputation or even hip disarticulation with an 80% mortality rate secondary to complications from distant metastasis. With the advent of multi agent chemotherapy, limb salvage surgery became feasible and as safe as amputation in management of patients with high grade osteosarcoma. We present the case of a 13 year old female diagnosed with Osteosarcoma of the right distal femur (Enneking Stage IIB) who underwent limb salvage surgery.

Keywords: Osteosarcoma, limb salvage surgery, amputation

56. Reconstruction of the Medial Patellofemoral Ligament in a Patient with Recurrent Patellar Dislocation Using the Quadriceps Tendon - A Case Report

Miguel Pocholo Luis R. Siatan, MD, Carmelo L. Braganza, MD, FPOA
Department of Orthopaedics, University of Santo Tomas Hospital

Background: The role of the medial patellofemoral ligament (MPFL) as the primary passive restraint of the patella has only been recognized in recent years. Aside from the established surgical techniques for recurrent patellar dislocation, such as imbrication, retinacular release, bony realignment, or plastic procedures, MPFL reconstruction is now being performed with excellent result. The reconstruction techniques currently advocated by many authors involve the use of free hamstring tendon grafts and the creation of bone tunnels in the patella and femur. However, complications, such as iatrogenic patellar fractures, have been described in literature. The purpose of this case report is to describe the use of the superficial layer of the quadriceps tendon in the reconstruction of the MPFL in a Filipino patient with recurrent patellar dislocation.

Case Summary: Our patient is a 17-year old male judo athlete who came in with a chief complaint of left knee pain. The patient had a history of two (2) episodes of traumatic patellar dislocation, and was diagnosed with Lateral Patellar Instability of the Left Knee. The patient underwent closed reduction of the patella at the ER and knee immobilizer was applied. The patient eventually underwent MPFL reconstruction at our institution.

Conclusion: In conclusion, MPFL reconstruction using a quadriceps tendon graft is a viable technique that is relatively simple, safe, and effective.

57. Myositis Ossificans in Bilateral Deltoids in a Chronic Intramuscular Diphenhydramine Injection User - A Case Report

Patrick Henry G. Lorenzo, MD, Nelson T. Lim, MD, FPOA
Department of Orthopaedics, University of Santo Tomas Hospital

Myositis ossificans is a condition involving ectopic growth of bone in the muscle typically seen in patients involving trauma. The pathogenesis is not clearly defined and is still not understood. Our patient is a 37 year old female with a 2 year history of chronically injecting herself with Intramuscular Diphenhydramine to gain sedative effects. The chronic use resulted to myositis ossificans on both deltoids later resulting to shoulder stiffness and elbow extension contracture. Surgical management was done to gain functional elbow flexion range of the right elbow.

58. Chronic Type III Acromioclavicular Joint Dislocation with an Associated SLAP Tear Treated by Arthroscopic Reconstruction of the AC Joint using AC Dog Bone Button and Autogenous Gracilis Tendon Graft and SLAP Repair - A Case Report

Tristan Noel P. Santiago, MD, Alberto Ma. V. Molano, MD, FPOA
Department of Orthopaedics, University of Santo Tomas Hospital

Background: Injuries to the AC joint are quite common representing up to 9% of shoulder girdle injuries. Treatment of AC joint injuries is dependent on the anatomic severity of the injury based on the classification system described by Rockwood. However, there is still no gold standard therapy option for the treatment of AC joint dislocations.

Case Presentation: We present a case of a 31-year-old male, a motorcycle racer, who presented with pain and inability to move the left shoulder after sustaining a direct trauma on the left shoulder from a motorcycle accident. Patient was initially managed conservatively but persistence of symptoms and due to the high physical demands of the patient, an arthroscopic reconstruction of the CC ligaments was done.

Conclusion: Due to the strength required to dislocate the AC joint, associated intraarticular pathologies of the shoulder should be kept in mind when managing such cases. Anatomic reconstruction of the CC ligaments using a nonrigid fixation augmented with a gracilis tendon autograft allowed restoration of the normal physiologic properties of the AC joint without compromising the biomechanical properties of the coracoid and the clavicle. The arthroscopic approach provided a minimally invasive surgery, reducing the intraoperative risks and complications associated with a more invasive surgery.

59. Functional Outcome of Patients Who Underwent Arthroscopic Wrist Surgery in UST Hospital from 2011 to 2015

Tristan Noel P. Santiago, MD, John Hubert C. Pua, MD, FPOA
Department of Orthopaedics, University of Santo Tomas Hospital

Background: Wrist arthroscopy has evolved into an established diagnostic and therapeutic procedure. Its use is expanding as minimally invasive procedures gain popularity, technological advancements surface, and ingenuity of surgeons develop coupled with greater knowledge of the normal and pathological arthroscopic anatomy of the wrist.

Objectives: The study aims to investigate the outcomes of all patients who underwent arthroscopic wrist surgery in UST Hospital from 2011 – 2015 by evaluating the DASH scores pre-operatively, and at 3 months-, 6 months-, and 12 months post-operatively.

Methods: All patients who underwent wrist arthroscopy during the said period were included. Patients were evaluated pre-operatively, at 3 months, 6 months, and 12 months post-operatively. Functional outcomes were assessed using the DASH Outcome Questionnaire. The average DASH scores were computed. ANOVA within subjects was used to determine statistical significant difference in the DASH scores of each patient.

Results: The DASH scores pre-operatively, at 3 months-, 6 months-, and 12 months-post operatively had a mean of 32.34, 23.25, 9.23, and 0.51 respectively. A repeated measures ANOVA with a Greenhouse-Geisser correction determined that the mean DASH scores differed statistically significantly between time points ($F = 54.230$, $p < 0.05$). Post hoc tests using the Bonferroni correction revealed that the DASH scores between pre-operative and 3 months post-operative, between pre-operative and 6 months post-operative, and between pre-operative and 12 months operative all differed statistically significantly ($p = 0.05$).

Conclusion: All patients have good functional outcomes after wrist arthroscopy. A statistically significant difference in the DASH scores was observed when pre-operative values were compared with 3 months-, 6 months-, and 12 months post-operatively. A statistically significant difference was seen in the outcome scores of all patients comparing between 3 months and 6 months post-

operative; between 3 months and 12 months post-operative; and between 6 months and 12 months post-operative.

Keywords: wrist arthroscopy, DASH score

60. Use of Serial Castings in Previously Untreated Idiopathic Clubfoot among Filipinos

Melchor T. Ang Jr., MD, Antonio Mario L. De Castro MD
Department of Orthopedics, Veterans Memorial Medical Center

Purpose: To report experience with serial castings of previously untreated idiopathic clubfoot among Filipino patients encountered in two government foundations

Methodology: Ambispective, case series of untreated idiopathic clubfoot cases encountered from July of 2010 to July 2012, treated with serial castings only. Clinical data gathered include gender, age, laterality, and severity of clubfoot deformity at presentation using the Dimeglio Classification. Final number of castings and post--casting Dimeglio scores in different age groups were documented for comparison.

Results: A total of 73 patients with untreated idiopathic clubfoot were encountered at Philippine Band of Mercy & Mabuhay
Deseret Foundation from July 2010 to July 2012. 57 patients were subsequently included aged 10 days old and the oldest at 13 years old (average of 2.95), with a male to female ratio of 3.42: 1.

Most (41 cases or 71.93%) had bilateral involvement. Of the 99 feet involved, majority (65 feet or 65.66%) are classified under severe type equinovarus using the Dimeglio classification. A total of 97 feet are successfully treated with an average of 14.09 serial castings (range of 7--22).

Conclusion: Our experience in using serial castings alone among previously untreated idiopathic clubfoot cases showed a high success rate though with higher average number of castings. Younger patients required lesser number of castings compared to their older counterparts. Adequate correction is also possible not only in cases performed immediately after birth but also on older patients.

61. Postoperative Mortality One Year After Partial Hip Arthroplasty for the Treatment of Hip Fractures in the Elderly Patients in Veterans Memorial Medical Center

Maria Carmencita P. Bacnis MD, Deejay M. Pacheco MD FPOA, Antonio Mario L. De Castro MD FPOA, Ruben C. Cardenas MD FPOA
Department of Orthopaedic Surgery, Memorial Medical Center

Objectives: To determine the mortality rate one year after partial hip arthroplasty in the treatment of hip fractures in the elderly patients and to evaluate the association of characteristics of patients with mortality rate one year after partial hip arthroplasty.

Design: Prospective descriptive.
Setting: Veterans Memorial Medical Center.
Participants: 226 patients aged 65 years old and above with an acute hip fracture treated with partial hip arthroplasty over a period of five years.

Main outcome measures: Postoperative mortality one year after partial hip arthroplasty in elderly patients treated with partial hip arthroplasty.

Results: Mortality one year after partial hip arthroplasty was15.9%.

Conclusion: The incidence of mortality within one year after partial hip arthroplasty was 15.9% in the study. A significant correlate to the mortality were age greater than 70 years and the presence of hypertension. No significant correlates in gender, type of fracture and comorbidities like the presence of diabetes and pulmonary conditions.

62. Accuracy of Shear Wave Elastogram in Detecting Median Nerve Stiffness for Diagnosing Carpal Tunnel Syndrome in The Medical City

Gian Carla T.S. Tan, MD/Ronald G. Yebes, MD FPCR, Vincent Marcus S. Abadilla, MD , Carlo Emmanuel J. Sumpaico, MD

No standard of reference is used for establishing the diagnosis of carpal tunnel syndrome. The gold standard is through clinical diagnosis but adjunct tests such as nerve conduction velocity test and ultrasonography were used but th this may be time consuming, expensive and invasive. B-mode ultrasonography (US) has been proposed as an aid in the initial assessment of carpal tunnel syndrome through measuring the median nerve cross-sectional area (CSA). There are limited studies in the use of shear wave elastography in the assessment of the stiffness of the median nerve. This study aims to determine the accuracy of shear wave elastogram in detecting median nerve stiffness for diagnosing carpal tunnel syndrome1,2,3. All Filipino patients >18 years old seen by an orthopedic surgeon from April 1, 2017 to September 2, 2017were stratified to those with CTS and those without CTS. CTS was diagnosed using CTS-6 Evaluation tool. MN CSA and SWE values were obtained from all patients. A total of 202 hands were scanned. Only 194 were included in this study. Five of which had bifid median nerves and one had prior hand surgery, hence, they were excluded in the study. The mean shear wave elastogram value was 4.124 ± 1.173 m/s.SWE value as well as the SWE value combined with those MN CSA is not significant with p-value of 0.671 and 0.126, respectively. Median nerve CSA remains statistically similar for both groups with a p-value of 0.338. Based on this study, there was no significant difference in the elastogram value between the two groups.

63. Addressing the Need for Orthopedic Epidemiologic Data through the PBO E-Logbook

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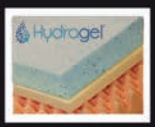

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The petri dish image is for illustrative purposes only. zone of inhibition testing results can vary.

Suture selection provides an important opportunity to address a known risk factor for infection – bacterial colonization of the suture.

SSIs are common & costly for patients and hospitals
Annual cost due to SSIs
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The CDC has revised its Guideline for the Prevention of SSI*

to now include a recommendation for the use of antimicrobial sutures: "Consider the use of triclosan-coated sutures for the prevention of SSI."[2]

World Health Organization (WHO) Global Guidelines for the Prevention of Surgical Site Infection*

The panel suggests the use of triclosan-coated sutures for the purpose of reducing the risk of SSI, independent of the type of surgery.[3]

American College of Surgeons & Surgical Infection Society (ACS & SIS) Surgical Site Infection Guidelines*

Triclosan antibacterial suture use is recommended for wound closure in clean and clean-contaminated abdominal cases when available.[4]

*The CDC, WHO, ACS & SIS guidelines on reducing the risk of surgical site infections are general to triclosan-coated sutures and are not specific to any one brand.

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References 1. Thompson KM, Oldenberg WA, Deschamps C, Rupp WC, Smith CD. Chasing zero. The drive to eliminate surgical site infections. Ann Surg. 2011;254:430-437. **2.** Healthcare Infection Control Practices Advisory Committee. Guideline for the Prevention of Surgical Site Infections. Centers for Disease Control and Prevention Website. http://www.cdc.gov/hicpac/pubs.html. Accessed March 31, 2017. **3.** Global guidelines on the prevention of surgical site infection. World Health Organization website. http://www.who.int/gpsc/ssi-prevention-guidelines/en/. Accessed March 23, 2017. **4.** Bari KA, Mirve JP, Laronga C, et al. American College of Surgeons and Surgical Infection Society: Surgical Site Infection Guidelines, 2016 Update. J Am Coll Surg. 2016;224:59-74. **5.** Barbolt TA. Chemistry and safety of triclosan, and its use as an antimicrobial coating on Coated Vicryl Plus Antibacterial Suture (coated polyglactin 910 suture with triclosan). *Surg Infect (Larchmt).* 2002;3 (suppl):S45-S53. **6.** Rothenburger S, Spangler D, Bhende S, Burkley D. In vitro antimicrobial evaluation of coated Vicryl Plus Antibacterial Suture (coated polyglactin 910 with triclosan) using zone of inhibition assays. *Surg Infect (Larchmt).* 2002;3 (suppl):S79-S87. **7.** Ming X, Rothenburger S, Yang D. In vitro antibacterial efficacy of Monocryl Plus Antibacterial Suture (poliglecaprone 25 with triclosan). *Surg Infect (Larchmt).* 2007;8(2):201-207. **8.** Ming X, Rothenburger S, Nichols MM. In vivo and in vitro antibacterial efficAcy of PDS Plus (polidioxanone with triclosan) suture. *Surg Infect (Larchmt).* 2008;9(4):451-457.

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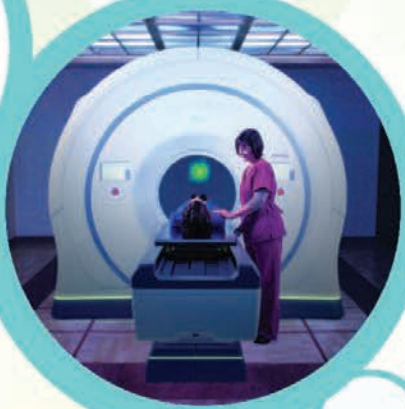

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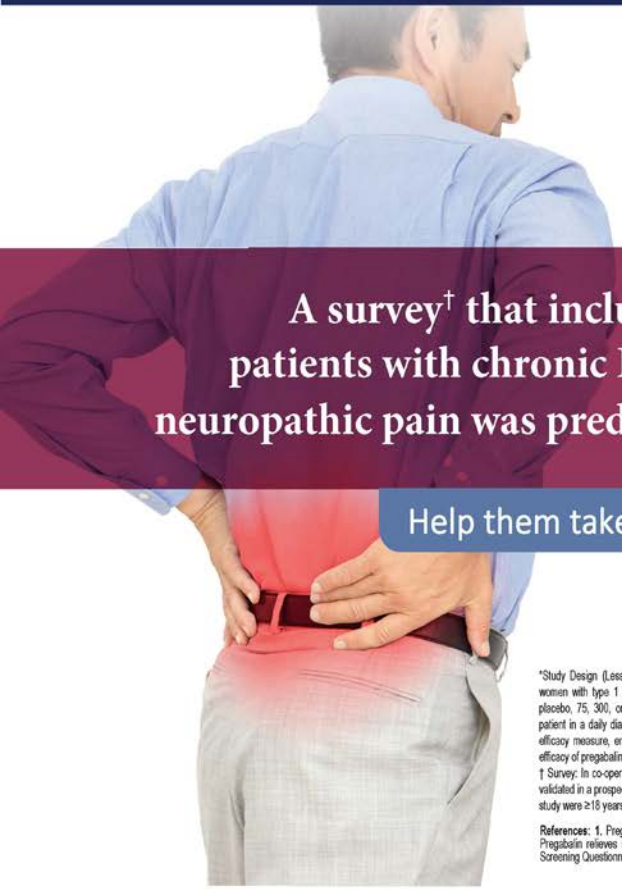

A survey† that included approximately 8,000 patients with chronic Low Back Pain found that neuropathic pain was predominant in 37% of cases [3]

Help them take control with Pregabalin (LYRICA)

*Study Design (Lesser H et al). A five week randomized, double-blind, placebo-controlled, parallel group, multicenter study. Adult men and women with type 1 or 2 diabetes mellitus and with distal symmetric sensorimotor polyneuropathy for 1-5 years were randomized to receive placebo, 75, 300, or 600 mg/day of pregabalin during the double-blind period. The primary efficacy measure was pain, as recorded by the patient in a daily diary; rating was based on an 11-point numerical scale that ranged from 0 (no pain) to 10 (worst possible pain). The primary efficacy measure, endpoint mean pain score, was significantly improved by pregabalin 300 and 600 mg/day when compared to placebo. The efficacy of pregabalin 75 mg/day, as anticipated, was not different from placebo.

† Survey: In co-operation with the German Research Network on Neuropathic Pain, the painDETECT questionnaire (PD-Q) was developed and validated in a prospective, multicenter study and subsequently applied to approximately 8,000 patients with Low Back Pain. Patients included in this study were ≥18 years old. The data were analyzed using descriptive statistics.[3]

References: 1. Pregabalin (Lyrica) FDA Registration Number: DRP-6121, DRP-6119, DRP-6120 **2.** Lesser H, Sharma U, LaMoreaux L, et al. Pregabalin relieves symptoms of painful diabetic neuropathy. Neurology 2004;63: 2104-2110. **3.** Freynhagen R, et al. PainDETECT: A New Screening Questionnaire to Identify Neuropathic Components in Patients with Back Pain. Curr Med Res Opin. 2006;22(10):1911-20.

Approved Indications. Pregabalin (Lyrica) is indicated for the treatment of neuropathic pain in adults, including neuropathic pain associated with spinal cord injury; as adjunctive therapy in adults with partial seizures, with or without secondary generalization; generalized anxiety disorder (GAD) in adults, and in the management of fibromyalgia.**Dosage and Administration.** The dosage range is 150 mg to 600 mg per day in either two or three divided doses. Pregabalin (Lyrica) may be taken with or without food. Neuropathic Pain- Can be started at 150 mg per day. Dosage may be increased to 300 mg per day after an interval of 3 to 7 days. Maximum dose of 600 mg per day after an additional 7-day interval. Epilepsy- Can be started with a dose of 150 mg per day. Dosage may be increased to 300 mg per day after one week. The maximum dosage of 600 mg per day may be achieved after an additional week. Fibromyalgia- Usual dose range is 300 to 450 mg per day given in two divided doses. Some patients may derive additional benefit at 600 mg per day. Generalized Anxiety Disorder (GAD) in Adults- The dose range is 150-600 mg per day given as two or three divided doses. Can be started with a dose of 150 mg per day. Based on individual patient response and tolerability, the dosage may be increased to 300 mg per day after 1 week. Following an additional week the dosage may be increased to 450 mg per day. The maximum dosage of 600 mg per day may be achieved after an additional week. **Discontinuation-** Discontinuation should be done gradually over a minimum of 1 week. **Use in children and adolescents-** The use in children is not recommended. **Contraindications.** Patients who have known hypersensitivity to pregabalin or to any of the excipients. **Precautions.** Pregabalin (Lyrica) may cause dizziness and somnolence and therefore may influence the ability to drive or use machines. Patients with rare hereditary problems of galactose intolerance, the Lapp lactase deficiency or glucose-galactose malabsorption should not take this medicine. Discontinue immediately if symptoms of angioedema or upper airway swelling occur. Postmarketing experience reported cases of transient visual blurring, loss of consciousness, confusion, mental impairment, and congestive heart failure. **Pregnancy, Lactation.** As with any CNS active drug, carefully evaluate patients for history of drug abuse and observe them for signs of pregabalin (Lyrica) abuse. A decision must be made whether to discontinue breast feeding or to discontinue from pregabalin therapy taking into account the benefit of breast- feeding for the child and the benefit of therapy for the woman. **Drug Interactions.** May potentiate the effects of ethanol and lorazepam. In postmarketing experience, there are reports of respiratory failure and coma in patients taking concomitant CNS depressant medications. Additive impairment of cognitive and gross motor function with oxycodone. **Side Effects.** The most commonly observed side effects from clinical trials include nasopharyngitis, increased appetite, euphoric mood, confusion, irritability, depression, disorientation, insomnia, decreased libido, dizziness, somnolence, ataxia, coordination abnormality, tremor, dysarthria, amnesia, memory impairment, disturbance in attention, paresthesia, hypoesthesia, sedation, balance disorder, lethargy, blurred vision, diplopia, vertigo, vomiting, constipation, flatulence, abdominal distention, dry mouth, muscle cramp, arthralgia, back pain, pain in limb, cervical spasm, peripheral edema, edema, gait abnormality, fall, feeling drunk, feeling abnormal, fatigue and weight increase. Most common observed side effects from post-marketing surveillance include headache, nausea and diarrhea.

For full prescribing information, please see package insert

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