

# APQA25

*Cairns, Australia*  
9-12 April 2025

Artificial  
Intelligence,  
Robotics  
and Mixed  
Reality



Free Papers  
2025

# Free Papers - Podium Presentations

## DIVERSITY, INCLUSION, EQUITY, WAVES | OSTEOPOROSIS, FRAGILITY, FRAILTY | INFECTION

Thursday 10th April 8.00am - 9.30am

|               |   |                             |
|---------------|---|-----------------------------|
| 8.00am        | Diversity in Orthopaedics - a study on stereotypes and review of literature   | Kiyana Mirza                |
| 8.06am        | A comparative analysis of Three Knee Arthrodesis Techniques to manage failed Knee Arthroplasty following Prosthetic Joint Infection: Intramedullary Nailing, LRS External Fixator, and Compression Plating                        | Raja Bhaskara Rajasekaran   |
| 8.12am        | Outcomes of Knee Arthrodesis Using External Fixator After Failed Total Knee Replacement because of uncontrolled Infection   | Uttam Chand Saini           |
| 8.18am        | Impact of Osteosynthesis vs. Arthroplasty on Postoperative Outcomes in Elderly Patients with Fragility Fractures at Risk of Delirium  | Derya Akbaba                |
| 8.24am        | The Relationship Between Subsequential Osteoporotic Thoracolumbar Fracture Risk and Epidural Steroid Injection as Non-surgical Management for Patients with Lumbar Spondylosis: A Retrospective Matched Cohort Study.             | Howard, Hao-wen Chen        |
| <b>8.30am</b> | <b>DISCUSSION</b>   |                             |
| 8.42am        | Correlation of Modified Frailty Index and Charlson Comorbidity Index with clinical outcomes based on Western Ontario and McMaster Universities Osteoarthritis Index in femoral neck fractures treated with total hip arthroplasty | Josiah Paolo Montales Mutia |
| 8.48am        | Clinical Validation of a Deep Learning-Based AI model Bone Mineral Density Prediction from Chest X-ray Images and its post-hoc validation   | Kun-Hui Chen                |
| 8.54am        | Osteoporotic Vertebral Compression Fracture- Classification Based Management Strategy   | Md Anowarul Islam           |
| 9.00am        | Fragility fractures are under recognised in RA  | Owen Taylor-Williams        |
| 9.06am        | Evaluation of using grip strength and hand muscle cross-sectional area to predict secondary fractures post distal radius fracture   | Tsz Kin Kong                |
| <b>9.12am</b> | <b>DISCUSSION</b>   |                             |



Artificial Intelligence, Robotics and Mixed Reality



## HIP

Thursday 10th April 8.00am - 10.00am

|               |  |                       |
|---------------|--|-----------------------|
| 8.00am        | Custom made 3D printed augments and cages- an effective option for management of severe acetabular bone loss   | Ameya Ajit Katariya   |
| 8.06am        | Reconstruction of the abductor function of the hip with a muscle-sparing vastus lateralis to gluteus medius translational transfer   | Boopalan Ramasamy     |
| 8.12am        | Revision Utilizing a Standard Cemented Stem in Early Postoperative Periprosthetic Femur Fractures  | Cheng-Chi Wang        |
| 8.18am        | Cementless Acetabular Cup Without Screw Holes: A minimum 20-year follow-up study   | Chun Man Lawrence Lau |
| <b>8.24am</b> | <b>DISCUSSION</b>  |                       |
| 8.40am        | Direct Anterior Approach for Total Hip Arthroplasty in Bony Ankylosis of hips  | Deepak Gautam         |
| 8.46am        | A novel algorithm for the calculation of the impingement-free range of motion and optimal component orientation of elevated-rim liners for total hip arthroplasty  | Hao Tang              |
| 8.52am        | Outcome of Pelvic Support Osteotomy with ilizarov in unstable hips in adolescents and younger age group.   | Muhammad Shoaib Khan  |
| 8.58am        | Who needs 3D planning in preoperative planning for total hip arthroplasty? A study using a custom impingement simulation model.  | Koki Abe              |
| 9.04am        | Variation in mortality following hip fracture across the Asia Pacific region: systematic review and proportional meta-analysis   | Lara A Harvey         |
| <b>9.10am</b> | <b>DISCUSSION</b>  |                       |
| 9.20am        | A Patient-specific Algorithm for Predicting Standing Sagittal Pelvic Tilt at One Year after Total Hip Arthroplasty: a Preliminary Validation Study   | Hao Tang              |
| 9.26am        | Kinematic Alignment for Cup Position in Total Hip Arthroplasty- Direct Anterior Approach using the Transverse Acetabular Ligament for Inclination and anteversion in conjunction with Anterior Acetabular Rim. This Achieves Functional Stability and "Patient Specific Safe Zone" | Praveen Singh Madan   |
| 9.32am        | Australian Design Cementless Stem Affords Stability With and Without a Collar at Mid-Term Follow-Up  | Rami Sorial           |
| 9.38am        | Posterior-only fixation in pelvic fractures: Is it sufficient in lateral compression injuries?   | Sandeep Patel         |
| <b>9.44am</b> | <b>DISCUSSION</b>  |                       |

# Free Papers - Podium Presentations

## KNEE

Thursday 10th April 1.30pm - 4.00pm

|               |  |                     |
|---------------|--|---------------------|
| 1.30pm        | Static Foot Pressure and Percentage Contact Area of the Foot as an Assessment Tool for the Success of Anterior Cruciate Ligament Reconstruction: A Cross-sectional Study   | Abhishek Agarwal    |
| 1.36pm        | Optimizing Femoral Component Rotation: A Comparative Evaluation of Robotic-Assisted versus Navigation-Assisted Total Knee Arthroplasty   | Azlina Amir Abbas   |
| 1.42pm        | meniscus reconstruction with autologous Tendon Graft   | Cheng-Pang Yang     |
| 1.48pm        | Comparison of Conventionally instrumented inverse Restricted Kinematic Alignment(irKA) and Robotic-assisted Gap-balance based TKA (ROSA) in the CPAK constitutional alignment restoration and functional outcomes: a case-cohort study | Chun-Hao Tsai       |
| 1.54pm        | Are Distal Femoral Valgus Cut Angles Reliable in Clinical Outcomes of Total Knee Arthroplasty?   | Derya Akbaba        |
| 2.00pm        | Combined Therapy of Autologous Protein Solution and Hyaluronic Acid for Knee Osteoarthritis: 1-Year Results  | Edmund Zhang        |
| 2.06pm        | Component Size Discrepancies and Their Influence on Three-Year Outcomes in Simultaneous Bilateral Total Knee Arthroplasty: A Multicenter Prospective Study   | Kunal Aneja         |
| <b>2.12pm</b> | <b>DISCUSSION</b>  |                     |
| 2.22pm        | Effect Of Dexamethasone On Post-Operative Pain Management In Patients Undergoing Total Knee Arthroplasty   | Junaid Khan         |
| 2.28pm        | Donor site morbidity following arthroscopic anterior cruciate ligament reconstruction using peroneus longus tendon autograft   | Kiyana Mirza        |
| 2.34pm        | Phenotype considered kinematically aligned total knee arthroplasty for windswept-deformity-associated osteoarthritis--surgical strategy and clinical outcome   | Kui-Chou Huang      |
| 2.40pm        | Postoperative full leg radiographs exhibit more valgus alignment compared to intraoperative measurements in robotic arm-assisted partial knee arthroplasty   | Haobo Wu            |
| 2.46pm        | Mid-Term Clinical and Functional Outcomes in Indian Patients Following Simultaneous Bilateral Total Knee Arthroplasty: Assessing the Impact of Body Mass Index   | Kunal Aneja         |
| 2.52pm        | Development and Validation of an Artificial Intelligence Preoperative Planning and Patient-Specific Instrumentation System for Total Knee Arthroplasty   | Peilai Liu          |
| 2.58pm        | Off-label ultra high dose of tranexamic acid infusion in primary total knee arthroplasty: A randomized multicenter clinical trial  | Qiang Huang         |
| <b>3.04pm</b> | <b>DISCUSSION</b>  |                     |
| 3.14pm        | Knee Phenotypes in Indian Populations: Insights for Personalized Arthroplasty Using CPAK Classification  | Kunal Aneja         |
| 3.20pm        | Advanced Osteoarthritis of Knee: New Treatment, New Hope   | Shahidul Islam      |
| 3.26pm        | Enhancing Knee Osteoarthritis Progression Prediction with a Novel Multimodal Machine Learning Model  | Sik Loo Tan         |
| 3.32pm        | 2 years clinical outcome for Anterior Cruciate Ligament Reconstruction Using Femoral and Tibial Cortical Button Fixation.  | tan wei how         |
| 3.38pm        | Biomechanical Analysis Post-ACLR Comparison With Functional Hop Test Results   | Timothy S Whitehead |
| 3.44pm        | How do I deal with soft tissue defect in knee arthroplasty   | Weijun Wang         |
| <b>3.50pm</b> | <b>DISCUSSION</b>  |                     |



Artificial Intelligence, Robotics and Mixed Reality



## HAND AND UPPER LIMB

Thursday 10th April 1.30pm - 4.00pm

|               |  |                             |
|---------------|--|-----------------------------|
| 1.30pm        | Enhanced Deep Feature Fusion for the Automated quantification of the fatty infiltration of the Rotator Cuff muscles using MRI  | Asma Salhi                  |
| 1.36pm        | All-arthroscopic muscle advancement procedure for massive retracted rotator cuff tears: clinical and radiological outcomes   | Kristine Italia             |
| 1.42pm        | Surgical outcomes and complication rates of arthroscopic-assisted fixation versus open fixation for coronoid fractures: A systematic review and meta-analysis                    | Leonard Christianto Singjie |
| 1.48pm        | The Clinical Course and Outcomes Following Arthroscopic Frozen Shoulder 360 Release  | Brandon Ziegenfuss          |
| 1.54pm        | The RADiCL Procedure: Repair/Augmentation of Dorsal Capsular Ligaments   | Greg Couzens                |
| 2.00pm        | Clinical outcomes of arthroscopic brachial plexus neurolysis for neurogenic thoracic outlet syndrome   | Kristine Italia             |
| <b>2.06pm</b> | <b>DISCUSSION</b>  |                             |
| 2.16pm        | Modular Approach to Carpal Instability   | Greg Couzens                |
| 2.22pm        | The application of total elbow arthroplasty in rheumatoid arthritis: a 5-year multicenter prospective long-term follow-up study  | Hao Xiong                   |
| 2.28pm        | Both intra-articular and intravenous tranexamic acid enhance visual clarity and reduce postoperative pain following arthroscopic rotator cuff repair: Retrospective cohort study | Hyojune Kim                 |
| 2.34pm        | A Novel Classification of Scaphoid Position in Scapholunate Instability  | Greg Couzens                |
| 2.40pm        | Personalised approach to patients with rotator cuff tears through data-driven machine learning for decision-making   | Asma Salhi                  |
| 2.46pm        | Validation of Mixed Reality Technology as a Guidance Tool in Shoulder Arthroplasty   | Kristine Italia             |
| <b>2.52pm</b> | <b>DISCUSSION</b>  |                             |
| 3.02pm        | Comparison in short term results between intra-articular sodium hyaluronate and intralesional corticosteroid injections for tennis elbow.  | Nattakorn Mahasupachai      |
| 3.08pm        | Trustworthy deep learning framework for the detection of abnormalities in shoulder x-ray images  | Asma Salhi                  |
| 3.14pm        | Correction of Forearm and Wrist Deformities in Hereditary Multiple Exostoses (HME) Using the Ilizarov Method   | Mofakhkharul Bari           |
| 3.20pm        | Reverse shoulder arthroplasty in acute proximal humeral fractures: the DFER approach   | Kristine Ramos Italia       |
| 3.26pm        | Quantifying the Difference In Glenoid Component Position Between Total Shoulder Arthroplasty And Reverse Shoulder Arthroplasty   | Rohit Sane                  |
| 3.32pm        | Radiographic Evaluation of the Humeral Side in Reverse Shoulder Arthroplasty   | Shu Yoshizawa               |
| <b>3.38pm</b> | <b>DISCUSSION</b>  |                             |

# Free Papers - Podium Presentations

## SPORTS

Thursday 10th April 4.00pm - 5.00pm

|               |  |                      |
|---------------|--|----------------------|
| 4.00pm        | Clinical and Functional Outcome of Selective PL Bundle Reconstruction in PTS with Partial ACL Tear; An ACL remnant preserving approach | Javed Iqbal          |
| 4.06pm        | Clinical outcomes of anterior cruciate ligament reconstruction using quadriceps tendon autograft versus hamstring tendons autograft    | Mohd Ammar Aslam     |
| 4.12pm        | Human Dermal Allograft Augmentation in Rotator Cuff Repair: Is there Patch Integration?  | Jonas Fernandez      |
| 4.18pm        | Concomitant meniscus repair with ACL reconstruction does not affect short term post operative outcomes clinically                      | Kennan Zhi Guang Yeo |
| <b>4.24pm</b> | <b>DISCUSSION</b>  |                      |
| 4.29pm        | Title; Triple Surgical approach in patients with atraumatic recurrent patellar dislocation.  | Javed Iqbal          |
| 4.35pm        | Peroneus longus in ACL reconstructions- comparison with hamstring graft  | Sanjay Yadav         |
| 4.41pm        | Arthroscopic 360-capsular release versus intraarticular steroid and hydro-dilatation in the treatment of primary adhesive capsulitis   | Shuja Auddin         |
| 4.47pm        | Relationship between the incidence of little leaguer's elbow and athletic performance in young baseball players                        | Yoshihiro Kotoura    |
| <b>4.53pm</b> | <b>DISCUSSION</b>  |                      |

## FOOT AND ANKLE

Thursday 10th April 5.00pm - 6.00pm

|               |   |                       |
|---------------|---|-----------------------|
| 5.00pm        | Outcomes in Surgically Treated Foot and Ankle Fractures Sustained in Extreme Sports   | Alexander Moore       |
| 5.06pm        | An Innovative Method of Closed Reduction and Percutaneous Pinning ( CRPP) for Complex Ankle Fractures Including Pilon Fractures                                     | Anilkumar Vidyadharan |
| 5.12pm        | Impact of Dorsal Closing Wedge Calcaneal Osteotomy on Hindfoot Alignment and Biomechanics in Patients with Insertional Achilles Tendinopathy                        | Bedri Karaismailoglu  |
| 5.18pm        | Plantar approach to surgical excision of Morton's interdigital neuroma  | David Fang            |
| <b>5.24pm</b> | <b>DISCUSSION</b>   |                       |
| 5.29pm        | Tibiototalcalcaneal arthrodesis: Comparison of ipsilateral distal fibular autograft as an intramedullary strut and lateral tibia plating versus intramedullary nail | Chien Hua Chen        |
| 5.35pm        | Should we put a screw in Akin osteotomy?  | Chun Hsien Huang      |
| 5.41pm        | Relationship between Radiological Parameters and Clinical Outcomes in Surgical Correction of Pes Planus   | Bedri Karaismailoglu  |
| 5.47pm        | Bone lengthening by small fixator; an innovative technique  | Jabed Jahangir        |
| <b>5.53pm</b> | <b>DISCUSSION</b>   |                       |



Artificial Intelligence, Robotics and Mixed Reality



## ONCOLOGY

Thursday 10th April 4.00pm - 6.00pm

|               |   |                                  |
|---------------|---|----------------------------------|
| 4.00pm        | Core needle biopsy with sampling the cyst wall (curopsy): Solving the enigma of needle biopsy for cystic bone lesions.  | Ameya Katariya                   |
| 4.06pm        | 3D printed plates in Orthopaedic Oncology reconstruction: are they worth the cost and effort?   | Manish Agarwal                   |
| 4.12pm        | Challenges of Suspending the upper limb after total scapulectomy in sarcoma patients: a durable and cheaper option  | Masood Umer                      |
| 4.18pm        | Does the addition of fibula, Vascularized or free, improve the outcomes of intercalary reconstructions following ECRT?  | Pradeesh Kiswanth Sundarapandian |
| 4.24pm        | PET-CT improves the Radiology based grading of chondrosarcomas  | Manish Agarwal                   |
| <b>4.30pm</b> | <b>DISCUSSION</b>   |                                  |
| 4.42pm        | Fresh Parental Fibular Allograft reconstruction of skeletal defects after limb salvage surgery in young children  | Masood Umer                      |
| 4.48pm        | En bloc excision and autogenous fibular reconstruction with wrist arthrodesis for aggressive giant cell tumor of distal radius                                  | Mohammad Serajus Saleheen        |
| 4.54pm        | Risk Factors For Local Recurrence After Extended Curettage In The Management Of Giant Cell Tumour - Has Anything Changed? - Retrospective Analysis Of 117 Cases | Raja Bhaskara Rajasekaran        |
| 5.00pm        | Management of benign tumours of proximal femur: a case series   | Masood Umer                      |
| <b>5.06pm</b> | <b>DISCUSSION</b>   |                                  |
| 5.18pm        | Making an affordable world-class Tumor Knee Prosthesis : challenges and solutions   | Manish Agarwal                   |
| 5.24pm        | Preventive Approach of Phantom Limb Pain In Lower Limb Ablation Surgery: A Systematic Review  | Rafael Marvin Yushan             |
| 5.30pm        | Functional outcomes of internal hemipelvectomy in pediatric patients with malignant bone tumors: a monocentric case series                                      | Masood Umer                      |
| 5.36pm        | Use of Non-Vascularized Osteo-Articular Fourth Metatarsal Graft for Reconstruction of Campanacci Grade Iii Giant Cell Tumour of Second Metacarpal Head          | Rajesh Arora                     |
| <b>5.40pm</b> | <b>DISCUSSION</b>   |                                  |

# Free Papers - Podium Presentations

## FOOT AND ANKLE

Friday 11th April 7.00am - 8.00am

|        |   |                           |
|--------|---|---------------------------|
| 7.00am | A comparative study of radiation exposure between C-arm fluoroscopy and portable X-ray camera   | <b>Dongjun Jeon</b>       |
| 7.06am | Arthroscopic Microfracture for Osteochondral Lesions of the Talus: Second-Look Arthroscopic and Magnetic Resonance Analysis of Cartilage Repair Tissue Outcomes | <b>Gun-Woo Lee</b>        |
| 7.12am | Analysis of Factors of ankle osteoarthritis in Japan  | <b>Masataka Kakihana</b>  |
| 7.18am | 3D volumetric analysis of posterior malleolus fractures: revisiting classification systems  | <b>Joash Avneel Kumar</b> |
| 7.24am | Long-Term Results of Subtalar Arthroereisis for Symptomatic Flexible Flatfoot in Pediatrics   | <b>Jou Hua Wang</b>       |
| 7.30am | Innovative Achilles recovery: elevating non-surgical treatment  | <b>Laura Clarke</b>       |
| 7.36am | Bone grafting for periprosthetic bone cysts following total ankle arthroplasty  | <b>Gun-woo Lee</b>        |
| 7.42am | <b>DISCUSSION</b>   |                           |



**Artificial Intelligence, Robotics and Mixed Reality**



## PAEDIATRICS

Friday 11th April 8.00am - 10.00am

|        |  |                                  |
|--------|--|----------------------------------|
| 8.00am | Demographics of Developmental Dysplasia Hip DDH in Pakistan. An evidence based audit of Paediatric Orthopaedic Registry of Pakistan (PORP).  | <b>Anisuddin Bhatti</b>          |
| 8.06am | Does subtalar arthroereisis augments the effect of combined hemiepiphyodesis in juvenile hallux valgus?  | <b>Chao-Yu Hsu</b>               |
| 8.12am | 3D Gait analysis of children with treated idiopathic Congenital Talipes Equinovarus following completion of Ponseti method of treatment.   | <b>Chasanal Rathod</b>           |
| 8.18am | Comparison of Clinical Outcomes, Parental Anxiety and Surgeon Satisfaction During Outpatient Clinic versus Operating Room Setting for Achilles Tenotomy – A Randomized Control Trial | <b>Karthick Rangasamy</b>        |
| 8.24am | Novel technique of plastering for radial hemimelia with ponseti like principles and its effects on subsequent surgical management  | <b>Rujuta Mehta</b>              |
| 8.30am | <b>DISCUSSION</b>  |                                  |
| 8.40am | Acute Correction with Simultaneous Hemiepiphyodesis of Lateral Proximal Tibia Physis; an Option to Prevent Recurrence in Neglected Infantile Blount's Disease                        | <b>Faisal Miraj</b>              |
| 8.46am | Artificial intelligence in the assessment of pediatric fractures using radiological methods: a systematic review   | <b>Gregorius Thomas Prasetyo</b> |
| 8.52am | Arthrogram Assisted Closed Reduction of Pediatric Lateral Condyle Humerus Fractures. A Prospective Cohort Study  | <b>Karthick Rangasamy</b>        |
| 8.58am | Evaluation of Compensatory Rotational Gait Kinematics in Children with Pathological Genu Valgum  | <b>Chasanal Rathod</b>           |
| 9.04am | Forefoot Supinatus with Metatarsus Primus Elevatus Following Subtalar Arthroereisis for Flexible Flatfoot in Children  | <b>Kuang yu Cheng</b>            |
| 9.10am | <b>DISCUSSION</b>  |                                  |
| 9.20am | Evaluating the Efficacy of ChatGBT in Guiding Paediatric Orthopaedic Urgencies   | <b>Muharrem Inan</b>             |
| 9.26am | Analysis of Whole Limb Alignment in Pediatric flat foot  | <b>Sung-Taek Jung</b>            |
| 9.32am | Precision and Aesthetic Optimization in Elbow Deformity Correction: Minimally Invasive Dome Osteotomy with Joystick technique  | <b>Sungmin Kim</b>               |
| 9.38am | An analysis of psychological morbidity in parents of children with idiopathic congenital talipes equinovarus being treated at the clubfoot clinic of KGMU                            | <b>Vikas Verma</b>               |
| 9.44am | Comparison of Short-term Outcomes of Bernese Periacetabular Osteotomy in Adolescents, Young adults and Middle-aged Adults: A Minimum Two-year Follow-up                              | <b>Yu-Hung Chen</b>              |
| 9.50am | <b>DISCUSSION</b>  |                                  |



**E-Posters can be viewed in the exhibition throughout the duration of the conference.**

# Free Papers - Podium Presentations

## TRAUMA

Friday 11th April 7.00am - 10.00am

|               |   |                                  |
|---------------|---|----------------------------------|
| 7.00am        | Role of tranexamic acid apropos major orthopedic trauma surgery   | <b>Arun Kumar Sharma</b>         |
| 7.06am        | Development and Initial Validation of AI Generated Topological Heatmap of Femoral Outline on Fluoroscopy for Rotational Alignment during IM Nailing   | <b>Benson Chang</b>              |
| 7.12am        | Use of Staffordshire Orthopedic Reduction Machine (STORM) in reduction and stabilization of tibial fractures  | <b>Buland Thapa</b>              |
| 7.18am        | Different Types of Apple-bite fractures: A Case Series and our surgery algorithm sharing.   | <b>Chin Jung Hsu</b>             |
| 7.24am        | Comparison of the Cement Augmentation Nailing to Non-cement Augmentation Nailing in Proximal Femur fracture by Radiographic and Clinical Outcomes: one-year follow-up.                                      | <b>Chin Ping Lin</b>             |
| 7.30am        | Short Versus Long Proximal Femur Nail for Treatment of Intertrochanteric Femur Fractures  | <b>Devendra Acharya</b>          |
| 7.36am        | Nailing in segmental fractures of tibia shaft- Analysis of determinants of union  | <b>Divit Singh</b>               |
| 7.42am        | Arthroscopy-Assisted vs Traditional Open Reduction Internal Fixation for Shoulder Posterior Fracture-Dislocation: A Comparative Study of Clinical Outcomes  | <b>Hao Wei Chang</b>             |
| 7.48am        | Comparison of clinical efficacy between Reconstruction of the Superior Acromioclavicular Ligament with Acellular Dermal Allografts and Clavicular Hook plate in Acromioclavicular Dislocations              | <b>Hyojune Kim</b>               |
| <b>7.54am</b> | <b>DISCUSSION</b>   |                                  |
| 8.02am        | A retrospective cohort study: comparison of arthroscopy-assisted reduction and internal fixation (ARIF) versus open reduction and internal fixation (ORIF) and our surgery algorithm for glenoid fractures. | <b>I-Hao Lin</b>                 |
| 8.08am        | Management of Fracture- dislocation proximal humerus in the young patient: Lesson learned   | <b>Jabed Jahangir</b>            |
| 8.14am        | Outcome of Ilizarov External fixator for the treatment of gap non-uniting mid shaft Tibia-fibula fractures: Our experience  | <b>Mohammad Kamruzzaman</b>      |
| 8.20am        | Effects of Displaced Lesser Trochanteric Fracture on Performance and Functional Outcomes in Elderly Patients with Intertrochanteric Fractures: A Retro-Pro prospective Cohort Study                         | <b>Napol Ratanasermsub</b>       |
| 8.26am        | Outcomes in Femoral Neck Fracture Patients Managed with Surgical Fixation Over 85 Years of Age  | <b>Justin Prendeville</b>        |
| 8.32am        | Neglected Trauma, Flap Coverage and Ilizarov: Limb salvage - A Revolution   | <b>Md Abdul Gani Gani Mollah</b> |
| 8.38am        | Effection of Digital orthopedic technology assisted MIPPO in the treatment of proximal tibiofibular fracture  | <b>Meng Li</b>                   |
| 8.44am        | Pattern of Casualties Attending In The Casualty Department of Mymensingh Medical College Hospital, Mymensingh, Bangladesh   | <b>Mohammad Kamruzzaman</b>      |
| <b>8.50am</b> | <b>DISCUSSION</b>   |                                  |
| 8.58am        | Evaluation of fragility fractures of the pelvis combined with proximal femoral fractures.   | <b>Jun-ya Kondo</b>              |
| 9,04am        | Comparison Of Traction Versus No Traction In Intertrochanteric Femur Fractures Pre-Operatively In Terms Of Pain Score   | <b>Junaid Khan</b>               |
| 9.10am        | Hip Strength in Elderly Hip Fractures: Intertrochanteric Versus Femoral Neck Fracture Patients - A Retrospective Study  | <b>Napol Ratanasermsub</b>       |



**Artificial Intelligence, Robotics and Mixed Reality**



## TRAUMA (continued)

Friday 11th April 7.00am - 10.00am

|               |   |                              |
|---------------|---|------------------------------|
| 9.16am        | Enhancing patient care through structured assessment of Supracondylar fractures: a quality improvement project at Holy Family Hospital, Rawalpindi Medical University                         | <b>Rahman Rasool Akhtar</b>  |
| 9.22am        | Novel Combitherapy For The Management Of Soft Tissue Component In Open Injuries -The Stanley Protocol For Compound Injuries   | <b>Sathish</b>               |
| 9.28am        | Functional Outcome of Neglected Tibia Plateau Fracture Fixation: Our Experience from Tertiary Care Hospital in Low Socioeconomic Country  | <b>Syed Akmal Sultan</b>     |
| 9.34am        | Customized Method of Closed Reduction and Percutaneous Pinning for Intra-Articular Fractures Distal Radius for Early Return to Livelihood   | <b>Vidyadharan Anilkumar</b> |
| 9.40am        | Efficacy and Safety of recombinant human Bone Morphogenetic Protein-2 (rhBMP-2) combined with Autologous Bone for the Treatment of Long Bone Nonunion: A Report of a Prospective Case Series. | <b>Wonseok Choi</b>          |
| 9.46am        | Minimizing Missed Diagnoses of Tibial Plateau Fractures: The Role of AI in Radiographic Evaluation  | <b>Yu-Chieh Hung</b>         |
| <b>9.52am</b> | <b>DISCUSSION</b>   |                              |

# Free Papers - Podium Presentations

## SPINE

Friday 11th April 1.30pm - 3.30pm

|               |  |                             |
|---------------|--|-----------------------------|
| 1.30pm        | Global reconstruction in post tubercular kyphotic deformity: An analysis of 607 cases  | Shah Alam                   |
| 1.36pm        | Evaluation of Traversing Nerve Root Injuries During Endoscopic Transforaminal Lumbar Interbody Fusion: Observation of traversing root via an accessory portal            | Chun Tseng                  |
| 1.42pm        | Assessing Neurological Complications in Thoracic Three-Column Osteotomy: A Clinical Application of a Novel MRI-Based Classification Approach                             | Chen-Wei Yeh                |
| 1.48pm        | Were the post-operative Halo-femoral traction and pre-operative Halo-gravity traction effective and safe for severe kyphoscoliosis with Type 3 spinal cord shape at apex | Cheng-Hung Chiang           |
| 1.54pm        | Spinal endoscopic decompression versus Interspinous process device for lumbar spinal stenosis: mid-term results of a comparison study                                    | Chiayu Lin                  |
| 2.00pm        | Surgical Safety Strategies for Cervical Kyphosis in Ankylosing Spondylitis Based on Modified C7 PSO  | Tao Huiren                  |
| <b>2.06pm</b> | <b>DISCUSSION</b>  |                             |
| 2.14pm        | Transformative Surgical Solutions for Adolescent Idiopathic Scoliosis: Achieving Optimal Outcomes with minimal instrumentation   | Shah Alam                   |
| 2.20pm        | Comparing outcomes of conventional vs. muscle-preserving laminoplasty for cervical myelopathy in a 5-year follow-up study  | Howard, Hao-wen<br>Hao Chen |
| 2.26pm        | Spine Virtual Fracture Clinics   | Julia Liew                  |
| 2.32pm        | Assessing Canal Clearance by Partial Corpectomy in Case of Thoracolumbar Burst Fractures Using a Novel Ct Based Area Metho   | Kamran Farooque             |
| 2.38pm        | Predicting Postoperative Improvement in JOABPEQ for Lumbar Spine Surgery Using Deep Learning   | Koki Hosozawa               |
| 2.44pm        | One-stage Posterior-only L5 Vertebral Column Resection for Spondyloptosis: Case Series   | Yanzhe Wei                  |
| <b>2.50pm</b> | <b>DISCUSSION</b>  |                             |
| 2.58pm        | The Impact of MRI-Measurable Muscle Parameters on Postoperative Outcomes in Spine Surgery  | Kuang-Ting Yeh              |
| 3.04pm        | Objective Functional Evaluations Following Endoscopic Spine Surgery: The Prospective Use of Smart Wearable Technology  | Muhammad Rifki<br>Alfajri   |
| 3.10pm        | Accuracy of thoracolumbar pedicle screw insertion with routine intraoperative navigation: A 15-year case series  | Pirateb Sundaram            |
| 3.16pm        | Effect Of Vitamin-D Supplementation In Adults Presenting With Chronic Lower Back Pain  | Rahman Rasool<br>Akhtar     |
| 3.22pm        | 360 Fusion or Posterior Only Fusion in Degenerative Spondylolisthesis: A Comparative Study   | Vinit Yadav                 |
| 3.28pm        | New surgical strategy for adult degenerative scoliosis: treat the driver, not the major curve  | Yen-Jen Chen                |
| <b>3.34pm</b> | <b>DISCUSSION</b>  |                             |



Artificial  
Intelligence,  
Robotics  
and Mixed  
Reality



## HIP (continued)

Friday 11th April 1.30pm - 3.30pm

|               |   |                            |
|---------------|---|----------------------------|
| 1.30pm        | Assessment of vascularity of femoral head after different methods of fixation of intracapsular neck femur fracture by DSA   | Snejudi Dipali Bera        |
| 1.36pm        | The effect of implant, surgical and patient factors on the long-term wear of highly cross-linked polyethylene liners  | Stuart Callary             |
| 1.42pm        | Characterization of rapidly destructive coxopathy in its early stage  | Tadashi Yasuda             |
| 1.48pm        | Direct anterior versus anterolateral and posterolateral approaches to total hip replacement: comparative accuracy of acetabular implant placement and early clinical outcomes | Ying-Lin Chen              |
| 1.54pm        | The Increasing Burden of Revision Arthroplasty on a Tertiary Referral Centre: Implications for resources, theatre and bed allocation  | Bogdan Solomon             |
| <b>2.00pm</b> | <b>DISCUSSION</b>   |                            |
| 2.10pm        | Neurovascular Deviations and Factors in Fused Hips: Implications for Hip Arthroplasty   | Kyung-Soon Park            |
| 2.16pm        | Infection vs Aseptic: A Cost-Analysis of Revision THA at a Tertiary Referral Centre   | Lucian Bogdan<br>Solomon   |
| 2.22pm        | Total Hip Replacement in Sickle Cell Disease Patients with Avascular Necrosis of Head of Femur: A Retrospective Observational Study   | Mohammed Lafi<br>Al-Otaibi |
| 2.28pm        | Adopting Robotic Assisted Arthroplasty – a surgeon's journey  | Nick Russell               |
| 2.32pm        | Open triradiate cartilage: how young is too young for periacetabular osteotomy in dysplastic hip  | Xiaodong Chen              |
| <b>2.40pm</b> | <b>DISCUSSION</b>   |                            |
| 2.50pm        | Reliability Analysis and Mid-term Follow-up Validation of Acetabular Bone Defect Classification Based on Key Point Fixation   | Zanqing Zhai               |
| 2.56pm        | Learning curve and short-term clinical outcomes of Mako robotic-assisted direct anterior approach total hip arthroplasty  | Qi Wang                    |
| 3.02pm        | Factors contraindicating participation in self-directed rehabilitation following elective Total Hip Replacement: an e-Delphi study  | Ben Glenwright             |
| <b>3.08pm</b> | <b>DISCUSSION</b>   |                            |

# Free Papers - Podium Presentations

## RESEARCH, REGISTRIES OR GUIDELINES

Friday 11th April 4.00pm - 6.00pm

|               |   |                                    |
|---------------|---|------------------------------------|
| 4.00pm        | Accuracy of Augmented Reality Head Mounted Device Assisted Pedicle Screw Placement in Lumbar Vertebrae of Goat Spine  | <b>Dhruv Maini</b>                 |
| 4.06pm        | Enhancing Radiation Safety Culture: Investigating the Mediating Role of Awareness Among Orthopedic Doctors and Operation Theatre Assistants                                     | <b>Junaid Khan</b>                 |
| 4.12pm        | Immersive Virtual Reality Simulation Training in Total Knee Arthroplasty and Transfer of Skills to Cadaver Dissection   | <b>Khairul Anwar Ayob</b>          |
| 4.18pm        | Enhanced Chemotaxis, Phagocytic and Osteoclast Precursor Characteristics of CD14++CD16- Monocytes in Response to Human Arthroplasty Revision Tissue: In vitro and In vivo Study | <b>Krishnamurithy Genasan</b>      |
| <b>4.24pm</b> | <b>DISCUSSION</b>   |                                    |
| 4.34pm        | Adherence to clinical care standards is associated with reduced mortality following hip fracture  | <b>Lara A Harvey</b>               |
| 4.40pm        | Extended Reality in Orthopedic Surgery: Where Are We Now? – A Systematic Review and Meta-Analysis of Randomized Controlled Trial  | <b>Leonard Christianto Singjie</b> |
| 4.46pm        | Factors associated with poorer outcomes after hip fracture in patients with cognitive impairment  | <b>Morag E Taylor</b>              |
| 4.52pm        | A Novel Tilted-Plane Ergometer for Target-Specific Rehabilitation: Modifying Muscle Recruitment and Joint Dynamics  | <b>Seonghyun Kang</b>              |
| 4.58pm        | Epidural PRP Injection: An Alternative Treatment of Spinal Pain   | <b>Shahidul Islam</b>              |
| <b>5.04pm</b> | <b>DISCUSSION</b>   |                                    |
| 5.14pm        | Effect of COVID 19 pandemic induced lockdown on the epidemiology of paediatric orthopaedic trauma patients admitted to the trauma centre of KGMU                                | <b>Vikas Verma</b>                 |
| 5.20pm        | Development of novel local drug delivery system for prevention and treatment of osteomyelitis   | <b>Wei-Hsun Wang</b>               |
| 5.26pm        | Development and Validation of a Deep-Learning Model to Predict Total Hip Replacement on Radiographs   | <b>Yi Xu</b>                       |
| 5.32pm        | Intra-articular injection of platelet-rich plasma attenuated anterior cruciate ligament transection-induced experimental osteoarthritis and nociception in rats                 | <b>Yi-Chi Jean</b>                 |
| <b>5.38pm</b> | <b>DISCUSSION</b>   |                                    |



Artificial Intelligence, Robotics and Mixed Reality



## FOOT AND ANKLE (continued)

Friday 11th April 4.00pm - 6.00pm

|               |  |                             |
|---------------|--|-----------------------------|
| 4.00pm        | Fourth-generation bunionectomy learning effect   | <b>Meghan Dares</b>         |
| 4.06pm        | Radiological and functional outcome of talus fracture in local population: Our experience in govt tertiary care trauma center                                    | <b>Vickash Kumar</b>        |
| 4.12pm        | Use of Strut Allografts in Distal Tibial Oblique Osteotomy for Varus Ankle Osteoarthritis  | <b>Meng-Chun Tsai</b>       |
| 4.18pm        | Ilizarov Method in the Management of Peripheral Vascular Disease (PVD), Raynaud's Phenomenon and Diabetic foot ulcer: Exploring a Novel Approach for Treatment   | <b>Mofakhkharul Bari</b>    |
| 4.24pm        | Ankle fractures with Chaput fragment: A new classification system with insights into morphology, classification and Surgical management                          | <b>Sandeep Patel</b>        |
| <b>4.30pm</b> | <b>DISCUSSION</b>  |                             |
| 4.40pm        | Ilizarov in Charcot Arthropathy and Management of Diabetic Foot Ulcer (DFU) using Tibial Transverse Technique (TTT), Bangladesh Experience                       | <b>Mofakhkharul Bari</b>    |
| 4.46pm        | Integrative multi-disciplinary model of care: a patient satisfaction perspective   | <b>Meghan Dares</b>         |
| 4.52pm        | Talar neck malunions – evaluation of kinematics, pedobarographic changes and patient reported outcome measures   | <b>Siddhartha Sharma</b>    |
| 4.58pm        | Clinical Outcomes of the Zadek Calcaneal Osteotomy for Insertional Achilles Tendinopathy in a Resource-Constrained Setting: A Case Series                        | <b>Rizwan Haroon Rashid</b> |
| 5.04pm        | Ankle Fusion Using the Ilizarov Method   | <b>Mofakhkharul Bari</b>    |
| <b>5.10pm</b> | <b>DISCUSSION</b>  |                             |
| 5.20pm        | Clinical and radiological outcomes of Modified Mitchell osteotomy using three-point fixation and Akin osteotomy for Hallux Valgus                                | <b>Sheng Pin Lo</b>         |
| 5.26pm        | Functional Outcome of Heel Pad Degloving Injuries  | <b>Rajesh Arora</b>         |
| 5.32pm        | What Do We Know About the Pathoanatomy of Talar Neck Malunions? Results From a 3D Morphometric Analysis  | <b>Siddhartha Sharma</b>    |
| 5.38pm        | Which surgical technique is more suitable for spear plate to correct hallux valgus ? comparative study between metatarsal shaft and distal metatarsal osteotomy. | <b>Tzu Cheng Yang</b>       |
| 5.44pm        | Arthroscopic Approach for Talocalcaneal Coalitions with Meniscus Allograft Interpositional Arthroplasty: Case Series and Clinical Outcomes                       | <b>Yu-Wen Huang</b>         |
| <b>5.50pm</b> | <b>DISCUSSION</b>  |                             |



# Free Papers - Short Oral Presentations



**Artificial  
Intelligence,  
Robotics  
and Mixed  
Reality**



## THURSDAY 10TH APRIL 12.30 - 1.30PM EXHIBITION AREA

|         |   |                                     |
|---------|---|-------------------------------------|
| 12.32pm | Evaluation of Management of Traumatic Subtrochanteric Femoral Fracture by Long Proximal Femoral Nail  | <b>A S M Nurul Alam Siddique</b>    |
| 12.34pm | Cross sectional study to assess knee deformities in pediatric outpatients and its correlation with nutritional status and regulators of bone metabolism   | <b>Akash Ramshankar Vishwakarma</b> |
| 12.36pm | Tibial tubercle osteotomy for the exposure of complex primary and revision TKR- our 21 years of experience  | <b>Ameya Ajit Katariya</b>          |
| 12.38pm | Outcome Of Hip Abduction Bracing (HAB) and Closed Reduction Casting In Developmental Dysplastic Hips (DDH). A Comparative Early And Long Term Follow-up Outcome   | <b>Anisuddin Bhatti</b>             |
| 12.40pm | Femur Nailing Post-Fat Embolism Syndrome: Advancing Femur Fracture Management in Polytrauma Cases   | <b>Apoorva Praveen Kabra</b>        |
| 12.42pm | Three in one procedure for habitual dislocation of patella  | <b>arun kumar sharma</b>            |
| 12.44pm | Research on Determining Bony Landmarks for Accurate Tibiofibular Syndesmotic Fixation: Cadaveric Validity and Safety Analysis of Angle Bisector Method  | <b>Bedri Karaismailoglu</b>         |
| 12.46pm | Functional Outcome of Acetabular Fracture Using Majeed Score: A Single-center Retrospective Study   | <b>Bintang Soetjahjo</b>            |
| 12.48pm | Acetabular fracture and central hip dislocation in osteogenesis imperfecta child treated surgically with bone grafts augmented by recombinant human bone morphogenetic protein-2: A rare case report                            | <b>Bintang Soetjahjo</b>            |
| 12.50pm | Prediction of Joint Moments from Kinematics Using Machine Learning in Children with Congenital Talipes Equino Varus and Typically Developing Peers  | <b>Chasanal Rathod</b>              |
| 12.52pm | Assessing the Necessity of Treating Distal Radius Fractures in Extremely Old Patients with Concurrent Ulnar Styloid Fractures   | <b>Chen Lin-Mu</b>                  |
| 12.54pm | Novel Stabilized Method with Absorbable Suture Loop and Knotless Suture Anchor in Augmentation of Medial and Lateral Collateral Ligament Helps Accelerate Early Rehabilitation in Acute Unstable Posterior Elbow Dislocation    | <b>Chien Ming Chen</b>              |
| 12.56pm | A Computer-Assisted Diagnostic Method for Classification of Iliac Wing Fractures  | <b>Chun-Hao Tsai</b>                |
| 12.58pm | Radiologic and clinical outcome comparison between expandable and static cages in open TLIF surgery: Two years retrospective cohort study   | <b>Chun-Yi Li</b>                   |
| 1.00pm  | Thickness of simple calcaneal tuberosity avulsion fractures influences the optimal fixation method employed   | <b>Chunliang Wang</b>               |
| 1.02pm  | The Association Between Upper Extremity Fragility Fractures and Lower Extremity Fractures in Elderly Patients: A Retrospective Analysis   | <b>Derya Akbaba</b>                 |
| 1.04pm  | Finger-pointing to the wrong conclusion? Pilot study into the validity of common method of assessing for integrity of Flexor Digitorum Superficialis by blocking Flexor Digitorum Profundus function                            | <b>Dr Shyan Goh</b>                 |
| 1.06pm  | Concurrent Pes Anserine Bursitis in patients referred for symptomatic knee osteoarthritis and its implications for Australian Commission on Safety And Quality In Health Care Osteoarthritis of the Knee Clinical Care Standard | <b>Dr Shyan Goh</b>                 |
| 1.08pm  | Incidence and Risk factors analysis of proximal femoral nail impingement in patients of intertrochanteric femur fracture -A Prospective Observational Study of Indian population  | <b>Shaikh Sana Mohammed Aamir</b>   |

## THURSDAY 10TH APRIL 3.30 - 4.00PM EXHIBITION AREA

|        |  |                               |
|--------|--|-------------------------------|
| 3.32pm | Improvements in RA peri-fracture care have offset increased mortality  | <b>Owen Taylor-Williams</b>   |
| 3.34pm | Management Outcome of Knee Septic Arthritis in Neonates and Infants : A Systematic Review  | <b>Paramita Ayu Saraswati</b> |
| 3.36pm | Transforaminal Epidural Steroid Injection in the Treatment of Pain in Foraminal and Extraforaminal Lumbar Disc Herniations   | <b>Petrea Iftimie Iftimie</b> |
| 3.38pm | Nailing in segmental fractures of femur shaft- Analysis of determinants of union   | <b>Prasiddh Hegde</b>         |
| 3.40pm | Comparison of Epidural Analgesia vs Intraoperative Peri-Articular Injection for Pain Management Following Total Knee Arthroplasty  | <b>Rahman Rasool Akhtar</b>   |
| 3.42pm | Effect of Pre-Operative Serum Vitamin-D Levels on Post-Operative Outcome in Total Knee Arthroplasty  | <b>Rahman Rasool Akhtar</b>   |
| 3.44pm | Use of tibialization of fibula and contralateral non-vascularized fibula for reconstruction of malignant/benign aggressive tumours of distal-mid tibia                     | <b>Rajesh Arora</b>           |
| 3.46pm | Age-wise comparative analysis of patients undergoing total knee arthroplasty: A multicenter indigenous experience  | <b>Ravi Teja Rudraraju</b>    |
| 3.48pm | Effect of intravenous dexamethasone as an adjuvant to Bupivacaine in USG guided Supraclavicular Brachial Plexus Block for postoperative analgesia after upper limb surgery | <b>Reetu Verma</b>            |
| 3.50pm | Role of percutaneous plantar fascia release in Ponseti serial casting of delayed presented clubfoot  | <b>Salik Kashif</b>           |
| 3.52pm | Flat Foot and Knee Pain, Is it often Overlooked? A Scoping Review  | <b>Samuel Andi Kusuma</b>     |
| 3.54pm | Prospective Randomized Study To Evaluate The Therapeutic Effect Of High Volume V/S Low Volume Caudal Epidural Injections In Lumbar PIVD                                    | <b>Sanjiv Kumar</b>           |
| 3.56pm | A Radiological Effectiveness of Fixed-Angle C-arm Tomosynthesis Image to Ensure Proper Screw Position at Scaphoid Fracture Models  | <b>SeongJu Choi</b>           |
| 3.58pm | Treatment of Avascular Necrosis of Femoral Head with Preserving Natural Joint by Laser Augmented PRP   | <b>Shahidul Islam</b>         |

# Free Papers - Short Oral Presentations



**Artificial  
Intelligence,  
Robotics  
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Reality**



## FRIDAY 11TH APRIL 12.30 - 1.30PM EXHIBITION AREA

|         |   |  |
|---------|---|--|
| 12.32pm | Conversion of the Sagittal Functional Safe Zone to the Coronal Plane Using a Mathematical Algorithm The Reason for Failure of the Lewinnek Safe Zone                      | <b>Hao Tang</b>                        |
| 12.34pm | Residual Deformity and Outcome in Non-Surgically Treated Tibial Shaft Fractures in Adolescents  | <b>Josiah Paolo<br/>Montales Mutia</b> |
| 12.36pm | Novel Patient Specific Coronoid Reconstruction using 3D-Metal Printing for Comminuted Coronoid Process Fracture: A Prospective Cadaveric Study with Clinical Applications | <b>Myung-Sun Kim</b>                   |
| 12.38pm | Comparison of Short and Long Proximal Femoral Nail in the Management of Intertrochanteric Femur Fractures in Terms of Mean Operative Time and Per-operative Blood Loss    | <b>Junaid Khan</b>                     |
| 12.40pm | Short-term outcomes of meniscus repair are not clinically worse than arthroscopic partial meniscectomy: A retrospective cohort study of 219 patients.                     | <b>Kamaraj<br/>Thirukumaran</b>        |
| 12.42pm | Disparity in clinical and radiological responses to denosumab in Giant cell tumor: A Comparative analysis   | <b>Lalit Maini</b>                     |
| 12.44pm | How useful is Navigation with automatic registration using a 3D C-arm?  | <b>Manish Agarwal</b>                  |
| 12.46pm | Coverage of fingertip amputation in lesser digits with volar advancement flap   | <b>Marvin Man Ting<br/>Chung</b>       |
| 12.48pm | Clinico radiological outcome of Postero-medial fixation in Tibial Plateau Fractures   | <b>Mayank<br/>Mahendra</b>             |
| 12.50pm | Comparative Outcomes of MIS TLIF and MIDLIF in the Treatment of Spondylolisthesis: A Retrospective Study  | <b>Ming-Hsien Hu</b>                   |
| 12.52pm | Treatment of the deformities due to metabolic disease   | <b>Mofakhkharul<br/>Bari</b>           |
| 12.54pm | Western-designed total knee implants mismatch Saudi patient knees   | <b>Mohammed Lafi<br/>Al-Otaibi</b>     |
| 12.56pm | Diagnostic Accuracy of Lever Sign Test in Acute and Chronic ACL Injuries  | <b>mohd ammar<br/>aslam</b>            |
| 12.58pm | Outcome of Fixation of Posterior Column of Acetabulum Through Stoppa Approach with Newer Technique: A Retrospective Study   | <b>Dharmendra<br/>Kumar</b>            |
| 1.00pm  | Risk factors for the severity of heterotopic ossification in patients with cerebral palsy   | <b>Muharrem Inan</b>                   |
| 1.02pm  | Early Result of arthroscopic lateral collateral ligament imbrication in atraumatic posterolateral rotatory instability  | <b>Nattakorn<br/>Mahasupachai</b>      |
| 1.04pm  | Efficacy of Topical Tranexamic acid in Total Knee Arthroplasty- a prospective study   | <b>Nitish Khosla</b>                   |

## FRIDAY 11TH APRIL 3.30 - 4.00PM EXHIBITION AREA

|        |   |                                  |
|--------|---|----------------------------------|
| 3.32pm | Additional cement augmentation reduces cage subsidence and improves clinical outcomes in oblique lumbar interbody fusion combined with anterolateral screw fixation: A retrospective cohort study | <b>Shih-Feng Hung</b>            |
| 3.36pm | Migration patterns of acetabular cups: a systematic review and meta-analysis of RSA studies   | <b>Stuart Callary</b>            |
| 3.38pm | Comparative Analysis of Lower-Limb Open Fractures: Impact of Arterial Injury on Clinical Outcomes - A Retrospective Cohort Study  | <b>Syed Akmal<br/>Sultan</b>     |
| 3.40pm | Evaluation of Acetabular Fracture Fixation: Clinical and Functional Outcomes Assessed with the Modified Harris Hip Score – Insights from a Single Trauma Center Experience                        | <b>Syed Akmal<br/>Sultan</b>     |
| 3.42pm | Peroneal Nerve Injury Followed by Proximal Fibular Osteotomy: The Impact of Osteotomy Level   | <b>Tim Chang</b>                 |
| 3.44pm | The Outcomes of the Ilizarov Technique as a Limb Salvage Procedure for Critical Bone Defects In Neglected or Open Lower Extremity Fractures: Experience from a Tertiary Care Trauma Centre        | <b>Vickash Kumar</b>             |
| 3.46pm | An analysis of factors associated with the carrying angle of human elbow in paediatric age group  | <b>Vikas Verma</b>               |
| 3.48pm | An Innovative Method of CRPP for the Treatment of Type III & IV Supracondylar Fractures Humerus in Children Without Fear of Conventional Complications  | <b>Visyadharan<br/>Anulkumar</b> |
| 3.50pm | A Novel method of Closed Reduction Percutaneous Pinning for Bicondylar Tibial Plateau Fractures with impending soft tissue complication   | <b>Visyadharan<br/>Anulkumar</b> |
| 3.52pm | Decrease the complication with Modified Pavlik Harness brace in treating DDH  | <b>Wei-Hsun Wang</b>             |
| 3.54pm | Short-term outcomes of distal metatarsal osteotomy for mild to moderate and severe hallux valgus.   | <b>Yuzuru<br/>Sakakibara</b>     |
| 3.56pm | Quality of Life in Patients with Failed Back Syndrome after Surgery for Lumbar Spinal Stenosis: A Single Center Retrospective Study   | <b>Zairin Noor</b>               |

# E-Posters

## FOOT AND ANKLE

Complex Total Ankle Replacement in Ankle Osteoarthritis, its Challenges and how to Rectify.  
 Effects and Safety of Intra-Articular Sodium Hyaluronate Injection for the Treatment of Ankle Osteoarthritis  
 Treatment of Soft Tissue Defects after Minimally Invasive Plate Osteosynthesis in Fractures of the Distal Tibia: Clinical Results after Reverse Sural Artery Flap  
 A Novel Treatment of Adult Hallux Rigidus with Hyaluronic Acid Scaffold Interposition with Platelet-Rich Plasma Injection, Post-Cheilectomy, First Metatarsophalangeal Joint: A Case Report  
 Clinical Diagnosis And Incidence Of Hypermobility Of First Ray In Patients With Hallux Valgus Versus No Hallux Valgus, Using A Novel Clinical Sign  
 Biomechanical Comparisons of Different Modes of Intramedullary Screws Fixation for Jones Fractures  
 Radiographic Transverse Tarsometatarsal Instability of Metatarsus Adductus in Hallux Valgus  
 Impact of Implementing an Orthopaedic Stream in a Metropolitan Tertiary High-Risk Foot Service

Dhivakaran Gengatharan  
 Gun-Woo Lee  
 Hyojun Lee  
 Nathania Mercado  
 Pineda-Obias  
 Seng Juong Wong  
 Shun-Ping Wang  
 Shun-Ping Wang  
 Ton Tran

## HAND AND UPPER LIMB

Effectiveness of Different Classification Systems in Surgical Planning and Decision-Making for Distal Radius Fractures: A Retrospective Analysis  
 A Machine Learning-Based Approach for Predicting Clinical Improvement after Surgical Treatment of Idiopathic Cubital Tunnel Syndrome  
 Clinical and Radiographic Results of Locking Plate with Medial Support Screw in Proximal Humerus Fracture – The more, the better?  
 Prevalence and Characteristics by Age and Sex in Pediatric Trigger Digits: South Korea Nationwide Analysis Using Korea Health Insurance Dataset  
 Uncommon Failure Mode of Well Repaired Rotator Cuff Tear: Finding at Revision Surgery  
 Surgical Treatment and Short-term Outcome for a Refractory Case of Medial Clavicle Osteitis Condensans: A Case Report  
 Ilizarov Frame in Forearm  
 Detection of Little Leaguer's Elbow by Ultrasonography with Deep Learning  
 Regenerative Medicine for Regaining Function: Comparing HA and PRP Injections in Managing Periarthritis Shoulder  
 Comparison of Outcomes Between Primary Total Elbow Arthroplasty and Plate Osteosynthesis in Distal Humerus Fractures with Concomitant Osteoporosis  
 Outcome Of The Scaphoid Non Union Using Open Reduction Internal Fixation With Iliac Crest Bone Graft (Fisk-Fernandez Technique)  
 Analysis of Shoulder Pain Based on Above-Elbow Splint Versus Below-Elbow Splint After Distal Radius Fracture Surgery  
 Impingement of Torn TFCC in the Sagittal Plane and its Relation with DRUJ Instability  
 The Differences of the Shoulder Injuries Between Right- and Left-Handed Young Baseball Players

Derya Akbaba  
 Jun-Hyuk Lim  
 Myung-Sun Kim  
 Jun-Ku Lee  
 Junkyung Hwang  
 Liandro Reuben Junio  
 Dolojan  
 Mofakhkharul Bari  
 Ryota Kojima  
 Sumit Banerjee  
 Myung-Sun Kim  
 Swagat Mahapatra  
 Uk Hur  
 Uk Hur  
 Yoshihiro Kotoura



**Artificial  
 Intelligence,  
 Robotics  
 and Mixed  
 Reality**



## HIP

Total Hip Arthroplasty Combined With Subtrochanteric Shortening Osteotomy for Dislocated Hip - Comparison with Outcomes Between Cementless Stem and Cemented Stem  
 Total Hip Arthroplasty for Acute Acetabular Fractures Through the 'Replace in Situ' Philosophy: Radiographic Assessment of Cup Stability  
 Variations in Surgical Technique-Related Cost Amongst Hip Arthroplasty Surgeons Using Direct Anterior Approach in Victoria and Tasmania and its Financial Implications.  
 Prior Lumbar Fusion with Intervertebral Vacuum Phenomenon Can Increase Dislocation Risk in Primary THR

Satomi Abe  
 Stuart Callary  
 Ton Tran  
 Yu-tsung Lin

## INFECTION

Co-relation Between 18F-FDG Labeled Leucocyte (WBC) PET/CT & Intra-Operative Findings in Osteoarticular Infections (OAI): Early Impressions  
 Limb Salvage Surgery with ILLIZAROVE In Trauma and Infection  
 Effectiveness of Antibiotic Coated Nail and Beads in Infection Eradication in Chronic Osteomyelitis and Infected Non Union of Long Bones  
 The Challenges Involved in Managing Infected Non-Union of the Tibia: A Series of 12 Patients  
 Outcomes of Traumatic Lower Limb Amputations After Primary and Delayed Primary Stump Closure

Ameya Ajit Katariya  
 Muhammad Shoaib Khan  
 Muhammad Shoaib Khan  
 Uttam Chand Saini  
 Uttam Chand Saini

## KNEE

Anterior Cruciate Ligament reconstruction: Quadriceps tendon graft compared with Semitendinosus tendon graft: A Retrospective Study  
 Patellar Tendon Reconstruction by Modified Lotke Procedure - Surgical Technique and Case Report  
 Effect Of Pre-Operative Serum Vitamin-D Levels On Post Operative Outcome In Total Knee Arthroplasty  
 Comparison Between Single-Stage Bilateral and Unilateral Medial Unicompartmental Knee Arthroplasty With Respect to Complications, Clinical Outcomes, and Costs  
 Devised a UKA Surgical Technique Using the One-Peg Method that Allows Readjustment of the Flexion Gap After the Final Trial.  
 Kinematic and Kinetic Differences in Paediatric and Adolescent Recurrent Patellofemoral Dislocators Using a Subject-Specific Gait Analysis Model  
 The Validity and Accuracy of 3D-printed Patient-Specific Instruments for High Tibial Osteotomy  
 Decoding Patellofemoral Pain: An Analysis of the Lower-Limb Biomechanics  
 Non-Invasive Method of Removing Tethered Surgical Drains Using Kirschner Wire with Ultrasound Guidance: An In-Vitro Experimental Study  
 Complex Tibial Plateau Malunion: Arthroscopy-Assisted Combined with 3D-PSI Surgery: From Laboratory to Clinical Application

Ashish Kumar  
 Dibakar Sarkar  
 Junaid Khan  
 Kaochang Tu  
 Ko Suzuki  
 Angel Aulakh  
 Peilai Liu  
 Sumit Banerjee  
 Vanea Bernardo  
 Uyvico-Lim  
 Yi-Sheng Chan

**E-Posters will be viewable in the exhibition area during  
 the conference**

# E-Posters



**Artificial  
Intelligence,  
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## ONCOLOGY

Atypical Pediatric Aneurysmal Bone Cyst  
 Bony Swelling in Medial End of Clavicle in an Adolescent Male  
 Giant Cell Tumour Of Patella: A Diagnostic Dilemma  
 Patient Specific Distal Tibia Prosthesis for Reconstruction in a Case of Recurrent Giant Cell Tumor  
 Resection and Re-implantation of Liquid Nitrogen Treated Bone in Diaphyseal Tibial Giant Cell Tumor  
 Limb Salvage of Pediatric Bone Sarcoma  
  
 Chondroblastoma Causing Expansile Lytic Lesion In Middle Phalanx: A Rare Presentation With Good Clinical Results  
 Use of Multiple Ray Resection for Hand Salvage in Secondary Chondrosarcoma of Metacarpal in HME  
 Langerhans Cell Histiocytosis in Lumbar Spine - A Rare Case Report  
 Aggressive Aneurysmal Bone Cyst of Transverse process and Body of Lumbar Spine  
 Osteochondroma of Proximal Fibula as a Cause for Proximal Tibio-Fibular Synostosis: A Case Report

Dhruv Maini  
 Dhruv Maini  
 Dhruv Maini  
 Lalit Maini  
 Lalit Maini  
 Mohammad Serajus Saleheen  
 Rajesh Arora  
  
 Rajesh Arora  
 Shahidul Islam  
 Vineet Kumar  
 Vineet Kumar

## OSTEOPOROSIS, FRAGILITY, FRAILTY

A case of osteoporosis discovered following hip pain.  
 Tumor Induced Osteomalacia : Challenges in Diagnosis & Management  
 Reliability Of Singh's Index As A Screening Tool Of Osteoporosis In Current Times

Katsuhisa Ishii  
 Pulak Sharma  
 Rajesh Arora

## PAEDIATRICS

outcome of Mlni open Innominate Osteotomy In the cases of Exstrophy Bladder  
 Bow Legs & Blount's Disease - Mind-boggling Deformities and How to Tackle Them  
 Bone and Joint Involvement in Beta Thalassaemic Patients: A Cross Sectional Study

Anurag Baghel  
 Mofakhkharul Bari  
 Nitish Khosla

## RESEARCH, REGISTRIES OR GUIDELINES

Recombinant Human Bone Morphogenetic Protein-2 Derived From Genetically-Modified Adipose-Derived Mesenchymal Stem Cells as a Novel Treatment Modality for Critical-Sized Bone Defects: A Preclinical Study in Sprague-Dawley Rats  
 Deep Learning Model to Predict Bone Penetration from Force Sensing  
 Impact Of COVID Pandemic On The Mental Well-Being Of Orthopaedic Patients: A Single-Centre Study  
 Unveiling the Health Nexus: Exploring Factors Influencing Future Health Risks Among Orthopedic Surgeons  
 Outcome of Formative OSCE with Immediate Feedback on the Performance of Surgical Clerks in the Clerkship Exam  
 Association of Neutrophil-to-Lymphocyte Ratio with Knee Osteoarthritis: a Meta-Analysis  
 Development of Novel Local Drug Delivery System for Prevention and Treatment of Osteomyelitis  
 Integrating Artificial Intelligence and Wearable IoT System in Long-Term Care Environments  
 Betulin Accelerated the Functional Recovery of Injured Muscle in a Mouse Model of Muscle Contusion

Anissa Feby Canintika  
  
 Hirotatsu Imai  
 Junaid Khan  
 Paramita Ayu Saraswati  
 Rahman Rasool Akhtar  
  
 Tzu-I Yang  
 Wei-Hsun Wang  
 Wei-Hsun Wang  
 Yueh-Hsiu Lu

## SPINE

Surgical Outcomes in Oblique Lumbar Interbody Fusion in Patients Aged Over 75 years old: Comparison with Patients Aged 65-74 Years Old and Under 65 Years Old  
 Robotic-Assisted Minimally Invasive Lumbopelvic Fixation for High-Energy Traumatic Sacral Fractures  
 Establishment of the Minimal Clinically Important Difference for the Scoliosis Research Society-22r Questionnaire in Japanese Adolescent Idiopathic Scoliosis Patients: A Study Using the Coplanar Surgical Method  
 FRAX Without BMD Predicts Postoperative Proximal Junctional Kyphosis and Vertebral Fracture in Adult Spinal Deformity Surgery  
 Correlations Between Cervical Spine Sagittal Alignment and Spinopelvic Parameters: Implications for Musculoskeletal Health in Independent Elderly Women  
 Comparative Study Between the Results of Micro-Lumbar Discectomy and Open Discectomy  
 Outcome of Single Stage Vertebral Column Resection (VCR) and Reconstruction for Three Column Correction in Kypho-Scoliotic Deformity  
 Multifactorial Genetic Analysis as A Prospective Predictor of Adolescent Idiopathic Scoliosis Development: Ladybird Homeobox 1 (LBX1) And Estrogen Receptor (ESR) mRNA Expression  
 Deformity Angular Ratio and its Correlation with Complications Rate  
 Caudal Epidural Injections Can Avoid Surgical Intervention in Patients with Chronic Sciatica  
 The Potency of Platelet-Rich Plasma for Chronic Low Back Pain: A Systematic Review and Meta-analysis of Randomized Controlled Trial  
 Diagnostic Dilemma between Telangiectatic Osteosarcoma (TOS) & Aneurysmal Bone Cyst  
 A Comparison Between Deep Learning-Based Artificial Intelligence and Human Doctors for Detection and Analysis of Vertebral Fracture  
 The Treatment Outcome and Strategy for Acute Postoperative Infection After Anterior Cervical Spine Surgery  
 Prevalence and Severity of Restless Leg Syndrome in Patients With Spinal Cord Injuries  
  
 Pilot Comparative Trial of Enriched Peripheral Blood Mononuclear Cells in Treating Degenerative Disc Disease  
 The Combination of Platelet-Rich Plasma and Cotton-Like  $\beta$ -Tricalcium Phosphate/Poly(lactic-Co-glycolic Acid) Fibers Promote Bone Repair in Osteoporotic Vertebral Defects in Rat Models via Macrophages.

Cheng-Hung Lee  
 Cheng-Min Shih  
 Junya Katayanagi  
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 Kuang-Ting Yeh  
 Md. Anowarul Islam  
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 Petrea Iftimie Iftimie  
 Samuel Andi Kusuma  
 Shahidul Islam  
 Sung-Kyu Kim  
 Sung-Kyu Kim  
 Syed Faraz Ul Hassan  
 Shah Gillani  
 Yuhsuan Chung  
 Yuichi Shimizu

## SPORTS

Comparative Study on the Functional Outcomes of Adults who Underwent Arthroscopic Anterior Cruciate Ligament Reconstruction with Bone-Patellar Tendon-Bone and Hamstring Tendon Autografts  
 Meniscus Injury Requiring Surgery During ACL Reconstruction Has Worse Pre- and Post-Operative Outcomes  
 Concomitant Meniscus Injury Has Higher Likelihood Of Achieving Minimal Clinically Important Difference After Anterior Cruciate Ligament Reconstruction Compared to Isolated ACL Injury  
 Effects of Placing Anterior Cruciate Ligament Grafts in Vancomycin Powder Reduces Infection Rate  
 Extra-articular Endoscopic Dorsal Wrist Ganglion Excision: A New Approach and Preliminary Results

Ernesto Carlo Buensuceso Arada  
 Kamaraj Thirukumar  
 Kennan Yeo  
 Muhammad Amir Sohail  
 Yang-Yi Wang

# E-Posters

## TRAUMA

|   |                           |
|---|---------------------------|
| Outcome of Sexual Dysfunction in the Cases of Fracture Sacrum Treated with Conservative and Operatively: A Retrospective Study  | Anurag Baghel             |
| A Case Report of Lower Limb Replantation and Reconstruction Using Ilizarov Method   | Atsushi Sugita            |
| Outcome of Complex Tibial Plateau Fractures with Ilizarov   | Md Abdul Gani Gani Mollah |
| Clinical Validation of Enhanced CT Imaging for Distal Radius Fractures Through Conditional Generative Adversarial Networks (cGAN)   | Hyojune Kim               |
| Influential Factors for Elbow Stiffness after Displaced Radial Head   | Jiho Lee                  |
| Analysis of Fracture Morphology of the Isolated Greater Tuberosity Fracture Associated with Shoulder Instability  | Jiho Lee                  |
| Surgical Fixation of Hip Fractures – A Novel Technique For Pre-Operative Planning   | Kamaraj Thirukumar        |
| Biomechanical Effect of the Design Parameters of the Screw Hole on Polyaxial Locking Strength at Different Screw Angulations  | Kun-Jih Lin               |
| Evaluation of Fixation for Distal Humeral Diaphyseal Fracture by Locking Compression Plate  | Mohammad Kamruzzaman      |
| Evolution of a Trauma Orthopedic department in a Multilevel Trauma Centre: A 5-Year Experience of Progress, Burden and Challenges in a Budget-Constrained Healthcare System | Syed Akmal Sultan         |
| Cotton-Shaped Artificial Bone Grafting Combined with TFNA Cement Augmentation System in the Revision Surgery of Proximal Femur  | Takahiro Toriyama         |
| Treatment of the Distal Forearm Fracture by Volar Dual Window Approach  | WeiTing Wang              |
| Efficacy of Recombinant Human Bone Morphogenetic Protein-2 (rhBMP-2) as a Bone Graft Material in Tibial Nonunion Patients   | Wonseok Choi              |



**E-Posters can be viewed in the exhibition throughout the duration of the conference.**