

**APQA25**  
*Cairns, Australia*  
9-12 April 2025

**Artificial  
Intelligence,  
Robotics  
and Mixed  
Reality**



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ePosters 2025

# E-Posters



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## 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

Foot Drop Following Prolonged Sitting: Conservative Management of a Case of Peroneal Nerve Palsy

Anatomical Reduction and Fixation of Open Fracture-Dislocations of the Hallux Proximal Phalanx Using Hypodermic Needles in Emergency Settings: A Case Report of a New Minimally Invasive Technique

## 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

Dhivakaran Gengatharan

Gun-Woo Lee

Hyojun Lee

Nathania Mercado  
Pineda-Obias

Seng Juong Wong

Shun-Ping Wang

Shun-Ping Wang

Ton Tran

Muhammed Yusuf Afacan

Muhammed Yusuf Afacan

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

## 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

Diagnosis and Treatment of Pediatric Osteoarticular Tuberculosis: A Rare Case Report

A Rare Case of Giant Polymicrobial Shoulder Abscess Developing Two Decades Post-Insect Bite

Ameya Ajit Katariya

Muhammad Shoaib Khan

Muhammad Shoaib Khan

Uttam Chand Saini

Uttam Chand Saini

Muhammed Yusuf Afacan

Muhammed Yusuf Afacan

## 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

Biomechanical and Finite-Element Analysis of Femoral Pin-Site Fractures Following Navigation-Assisted Total Knee Arthroplasty

DIMO classification system—A novel classification for navigation-assisted TKA pin-site

Ashish Kumar

Dibakar Sarkar

Junaid Khan

Kaochang Tu

Ko Suzuki

Angel Aulakh

Peilai Liu

Sumit Banerjee

Vanea Bernardo  
Uyvico-Lim

Yi-Sheng Chan

Houyi Sun

Houyi Sun

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

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## ONCOLOGY

Atypical Pediatric Aneurysmal Bone Cyst	Dhruv Maini
Bony Swelling in Medial End of Clavicle in an Adolescent Male	Dhruv Maini
Giant Cell Tumour Of Patella: A Diagnostic Dilemma	Dhruv Maini
Patient Specific Distal Tibia Prosthesis for Reconstruction in a Case of Recurrent Giant Cell Tumor	Lalit Maini
Resection and Re-implantation of Liquid Nitrogen Treated Bone in Diaphyseal Tibial Giant Cell Tumor	Lalit Maini
Limb Salvage of Pediatric Bone Sarcoma	Mohammad Serajus Saleheen
Chondroblastoma Causing Expansile Lytic Lesion In Middle Phalanx: A Rare Presentation With Good Clinical Results	Rajesh Arora
Use of Multiple Ray Resection for Hand Salvage in Secondary Chondrosarcoma of Metacarpal in HME	Rajesh Arora
Langerhans Cell Histiocytosis in Lumber Spine - A Rare Case Report	Shahidul Islam
Aggressive Aneurysmal Bone Cyst of Transverse process and Body of Lumbar Spine	Vineet Kumar
Osteochondroma of Proximal Fibula as a Cause for Proximal Tibio-Fibular Synostosis: A Case Report	Vineet Kumar
Thyroid Metastasis of Osteosarcoma: Management of a Rarely Detected Case with Multidisciplinary Approach	Muhammed Yusuf Afacan

## OSTEOPOROSIS, FRAGILITY, FRAILTY

A case of osteopolikilosis discovered following hip pain.	Katsuhisa Ishii
Tumor Induced Osteomalacia : Challenges in Diagnosis & Management	Pulak Sharma
Reliability Of Singh's Index As A Screening Tool Of Osteoporosis In Current Times	Rajesh Arora
Cost Analysis of Arthroplasty Treatments for Fragility Fractures of the Femoral Neck: Hemi Versus Total Hip Arthroplasty	Muhammed Yusuf Afacan

## PAEDIATRICS

outcome of Mlni open Innominate Osteotomy In the cases of Exstrophy Bladder	Anurag Baghel
Bow Legs & Blount's Disease - Mind-boggling Deformities and How to Tackle Them	Mofakhkharul Bari
Bone and Joint Involvement in Beta Thalassemic Patients: A Cross Sectional Study	Nitish Khosla
TRPV4-related dysplasias - a case series	Janus Wong

## 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	Anissa Feby Canintika
Deep Learning Model to Predict Bone Penetration from Force Sensing	Hirotsatsu Imai
Impact Of COVID Pandemic On The Mental Well-Being Of Orthopaedic Patients: A Single-Centre Study	Junaid Khan
Unveiling the Health Nexus: Exploring Factors Influencing Future Health Risks Among Orthopedic Surgeons	Paramita Ayu Saraswati
Outcome of Formative OSCE with Immediate Feedback on the Performance of Surgical Clerks in the Clerkship Exam	Rahman Rasool Akhtar
Association of Neutrophil-to-Lymphocyte Ratio with Knee Osteoarthritis: a Meta-Analysis	Tzu-I Yang
Development of Novel Local Drug Delivery System for Prevention and Treatment of Osteomyelitis	Wei-Hsun Wang
Integrating Artificial Intelligence and Wearable IoT System in Long-Term Care Environments	Wei-Hsun Wang
Betulin Accelerated the Functional Recovery of Injured Muscle in a Mouse Model of Muscle Contusion	Yueh-Hsiu Lu



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## 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	Cheng-Hung Lee
Robotic-Assisted Minimally Invasive Lumbopelvic Fixation for High-Energy Traumatic Sacral Fractures	Cheng-Min Shih
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	Junya Katayanagi
FRAX Without BMD Predicts Postoperative Proximal Junctional Kyphosis and Vertebral Fracture in Adult Spinal Deformity Surgery	Junya Katayanagi
Correlations Between Cervical Spine Sagittal Alignment and Spinopelvic Parameters: Implications for Musculoskeletal Health in Independent Elderly Women	Kuang-Ting Yeh
Comparative Study Between the Results of Micro-Lumbar Discectomy and Open Discectomy	Md. Anowarul Islam
Outcome of Single Stage Vertebral Column Resection (VCR) and Reconstruction for Three Column Correction in Kypho-Scoliotic Deformity	Md. Anowarul Islam
Multifactorial Genetic Analysis as A Prospective Predictor of Adolescent Idiopathic Scoliosis Development: Ladybird Homeobox 1 (LBX1) And Estrogen Receptor (ESR) mRNA Expression	Muhammad Rifki Alfajri
Deformity Angular Ratio and its Correlation with Complications Rate	Muhammad Hanif Mian
Caudal Epidural Injections Can Avoid Surgical Intervention in Patients with Chronic Sciatica	Petrea Iftimie Iftimie
The Potency of Platelet-Rich Plasma for Chronic Low Back Pain: A Systematic Review and Meta-analysis of Randomized Controlled Trial	Samuel Andi Kusuma
Diagnostic Dilemma between Telangiectatic Osteosarcoma (TOS) & Aneurysmal Bone Cyst	Shahidul Islam
A Comparison Between Deep Learning-Based Artificial Intelligence and Human Doctors for Detection and Analysis of Vertebral Fracture	Sung-Kyu Kim
The Treatment Outcome and Strategy for Acute Postoperative Infection After Anterior Cervical Spine Surgery	Sung-Kyu Kim
Prevalence and Severity of Restless Leg Syndrome in Patients With Spinal Cord Injuries	Syed Faraz Ul Hassan Shah Gillani
Pilot Comparative Trial of Enriched Peripheral Blood Mononuclear Cells in Treating Degenerative Disc Disease	Yuhsuan Chung
The Combination of Platelet-Rich Plasma and Cotton-Like $\beta$ -Tricalcium Phosphate/Polylactic-Co-Glycolic Acid Fibers Promote Bone Repair in Osteoporotic Vertebral Defects in Rat Models via Macrophages.	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	Ernesto Carlo Buensuceso Arada
Meniscus Injury Requiring Surgery During ACL Reconstruction Has Worse Pre- and Post-Operative Outcomes	Kamaraj Thirukumaran
Concomitant Meniscus Injury Has Higher Likelihood Of Achieving Minimal Clinically Important Difference After Anterior Cruciate Ligament Reconstruction Compared to Isolated ACL Injury	Kennan Yeo
Effects of Placing Anterior Cruciate Ligament Grafts in Vancomycin Powder Reduces Infection Rate	Muhammad Amir Sohail
Extra-articular Endoscopic Dorsal Wrist Ganglion Excision: A New Approach and Preliminary Results	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 Thirukumaran

Biomechanical Effect of the Design Parameters of the Screw Hole on Polyaxial Locking Strength at Different Screw Angulations

Kun-Jhih 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

Conservative Management of Isolated Greater Tuberosity Fracture-Dislocation: Post-Traumatic Subacromial Impingement Syndrome and Literature Review

Muhammed Yusuf Afacan

Compartment syndrome of the forearm due to acquired hemophilia A: a case report

Tanak Keisuke



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