Limb Lengthening and Reconstruction Society: ASAMI–North America

Virtual Meeting

July 30, 2020 – January 29, 2021

Course Chairs
Austin T. Fragomen, MD
Raymond W. Liu, MD
L. Reid Nichols, MD
David Podeszwa, MD

8:00–8:04 p.m. Welcome, Introduction

Live Presentations of Scientific Papers

Session 1: Radiograph Derived

8:05–8:12 p.m. Comparison of Lower Extremity Segment Length Prediction Accuracy of the Sanders Multiplier, Paley Multiplier, and White–Menelaus Formulae
Marina R. Makarov, MD

8:13–8:19 p.m. Treatment for Ankle Valgus in Multiple Hereditary Exostoses
David S. Feldman, MD

8:20–8:28 p.m. Discussion

Session 2: Limb Salvage – Amputation

8:29–8:36 p.m. Quality of Life and Satisfaction Assessment After Successful Bone Transport in Patients with Segmental Tibial Deficit – Gonzalo F. Bastias MD

8:37–8:44 p.m. Outcomes, Safety and Cost–effectiveness of Single–Stage Intramedullary Nails for Fracture Related Infections and Infected Nonunions – Olivia M. Rice, MD

8:45–8:52 p.m. Patient Reported Outcomes Assessment of 267 Children and Adolescents with Lower Limb Deficiency: A Multi–Center Study – Sarah Nossov, MD

8:53–9:04 p.m. Discussion

Session 3: Pearls & Pitfalls

9:05–9:12 p.m. Complications Requiring Readmission Following Limb Lengthening: A 10 Year U.S. Database Study – Ashish Mittal

9:13–9:20 p.m. Anesthesia Choice affects Length of Stay for Pediatric Acute Correction Patients
Philip K. McClure, MD
9:21–9:28 p.m. Intramedullary Nailing with Supplemental Plate and Screw Fixation of Long Bones of Patients with Osteogenesis Imperfecta: Short–term Follow–up
Jeanne M. Franzone, MD

9:29–9:40 p.m. Discussion

Session 4: Intramedullary Implants

9:41–9:48 p.m. Weight–bearing Internal Lengthening Nail: Results on 57 Consecutive Stature Lengthening Patients – Craig Robbins, MD

9:49–9:56 p.m. Extramedullary Implantable Limb Lengthening (EMILL) for Congenital Limb Length Discrepancy – Claire E. Shannon, MD

9:57–10:04 p.m. Discussion

10:05–10:10 p.m. Closing Statements

Pre–Recorded Special Presentations

Traveling Fellowship 2019 Report (15 minutes)
James Blair, MD
Paul Matuszewski, MD
Claire E. Shannon, MD
Megan Young, MD

Clinician Scholar Career Development Program Presentation (10 minutes)
Joshua Speirs, MD

Pre–Recorded Scientific Papers

Session 1: Biomechanics & Metabolic (6 minutes each)

Rigidity of Hip–Spanning External Fixation as Affected by Pelvic Pin Location, Angulation, and Number of Pins – David Podeszwa, MD

Effect of Dynamization Modules on Bone Segment Vertical and Lateral Displacements
Erin Honcharuk, MD

Does Vitamin D Insufficiency affect Healing during Distraction Osteogenesis?
Jessica C. Rivera, MD, PhD

Comparing Clinical and Radiological Outcomes in two Paediatric Cohorts undergoing Tibial Deformity Correction – Juergen Messner

Session 2: Trauma, Limb Salvage & Amputation Reconstruction (6 minutes each)

Union with Retained Cement Spacers – Deferment of Second Stage Grafting in the Masquelet Technique
Stephen J. Wallace, MD
Amputation Outcomes following Military Gustilo and Anderson 3C Lower Extremity Fractures  
Jessica C. Rivera, MD, PhD

Can We Predict When Exchange Nailing for Long Bone Nonunion Will Fail?  – Brandon Collofello

Mid–term Results of Utilizing a Nail for Intercalary Allograft Reconstruction After Tumor Resection  
Lee M. Zuckerman, MD

Complications of Regional and Local Anesthesia in the Operative Treatment of Tibia Fractures: Safety for the Patient and Staff – Olivia M. Rice, MD

Early Experience with Bone Anchored Osseointegration Prostheses – Taylor J. Reif

Evaluation of Fracture and Osteotomy Union in the Setting of Osteogenesis Imperfecta: Multicenter Reliability of the Modified Radiographic Union Score for Tibial Fractures (RUST)  
Jeanne M. Franzone, MD

Vascularized Fibula Transfer with External Fixation for the Treatment of Bone Defects and Nonunions in Children – Melissa Esparza, MD

Session 3: Foot & Ankle (6 minutes each)

Hexapod–assisted Arthroscopic Ankle Arthrodesis for Severe Rigid Post Traumatic Equinus Deformity  
Gonzalo F. Bastias MD

Functional Implications of the Flat–Topped Talus Following Treatment of Idiopathic Clubfoot Deformity  
Anthony Riccio

Do We Really Need to Worry about Calcaneocuboid Subluxation during Lateral Column Lengthening for Planovalgus Foot Deformity?  – Anthony Riccio

The Effect of Lateral Column Lengthening on Subtalar Motion: Are We Trading Deformity for Stiffness?  
Jacob Zide

Subtalar Joint Deformity Correction and Arthrodesis – Douglas N. Beaman, MD

Session 4: Limb Deformity (6 minutes each)

Comparison and Validation of Pre–operative Planning Techniques for Distal Femoral Osteotomies and Proximal Tibial Osteotomies – David T. Zhang

Pin Site Care – Updates on an International Multicentre Pin Site Infection Study – Anthony Cooper

The Effect of Silver–Plated Dressing on Pin Site Complication in Patients Undergoing Limb Lengthening and Deformity Correction using a Circular Frame – Elaine Tran, MD

Integrated Limb Lengthening is Superior to Classical Limb Lengthening: A Systematic Review and Meta–analysis of the Literature – Gerard A. Sheridan

Correction of Tetratorsional Malalignment Improves Patient Reported Outcomes – Taylor J. Reif
Epidural Anesthesia May Increase Opioid Consumption in Adult Gradual Correction Patients  
*John E. Herzenberg, MD*

Accuracy and Safety of Distal Valgus Correction: Comparison of Three Techniques  
*Christopher A. Iobst, MD*

**Session 5: Internal Lengthening Nail** (6 minutes each)

Humerus Lengthening: A Comparison of the Internal Lengthening Nail to External Fixation  
*Sherif Hassan*

Nails for Femur Lengthening – *Sherif Hassan*

Magnetically Driven Intramedullary Limb Lengthening in Patients with Pre–Existing Implanted Programmable Devices: A Case Series – *Christopher A. Iobst, MD*

Cost Comparison of Tibial Distraction Osteogenesis with External Lengthening and Then Nailing (LATN) Versus Internal Magnetic Lengthening Nail (MLN) – *Aleksey Dvorzhinskiy*

Evaluating the Utility of the Pixel Value Ratio in the Determination of Time to Full Weight Bearing in Patients Undergoing Limb Lengthening Using an Intramedullary Device – *Christopher A. Iobst, MD*

Paediatric Femoral Lengthening Using Intramedullary Versus External Fixator Devices: A Single Surgeon Matched Cohort Series – *Laura Tillotson*

**Session 6: Pediatric Limb Deformity** (6 minutes each)

Does an Osteotomy Performed in Congenital Pseudarthrosis of the Tibia Heal? - *Nickolas J. Nahm*

Proximal Femoral Guided Growth for Dysplastic Hips in Children with Cerebral Palsy  
*Jacob R. Carl, MD*

Modernization of Bone Age Assessment: Comparing the Accuracy and Reliability of an Artificial Intelligence Algorithm and Short–Hand Bone Age to Greulich and Pyle – *Mina Gerges*

What Matters Most to Children with Lower Limb Deformities – An International Qualitative Study Informing the Development of a New Patient Reported Outcome Instrument – LIMB–Q Kids  
*Harpreet Chhina*

Estimating Skeletal Maturity using Knee Radiographs during Pre–adolescence – The Epiphyseal: Metaphyseal Ratio – *Alex Benedick*

Skeletal Maturity using Knee X–rays: Understanding the Resilience of Eight Radiographic Parameters to Rotational Position – *Julio Cesar Castillo Tafur*

Core Psychosocial Issues for Children and Adolescents in the Context of Limb Lengthening and Reconstruction Surgery Treatment – *Amber Hamilton*
Limb Lengthening in Russell–Silver Syndrome: An Update Confirming Safe and Speedy Healing
Christine M. Goodbody

Meta–analysis of Limb Lengthening and Related Complications in Osteogenesis Imperfecta
David S. Feldman, MD

Treatment Based Classification of Arthrogrypotic Hips and Knees – David S. Feldman, MD

Single Stage Surgery for Arthrogrypotic Hip and Knee Flexion Contractures – David S. Feldman, MD

Depression of the Medial Tibial Plateau in Infantile Blount Disease – Can Pathologic Bony Changes be Reversed with Guided Growth Treatment? – Melinda S. Sharkey, MD

Poster Presentations

Femoral Monofocal Sequential Compression–distraction Osteosynthesis Following Closing Wedge Osteotomy using a Magnetically–controlled Intramedullary Nail: A Case Report – John A. Scolaro

Distraction Osteogenesis Using Dual Magnetically Expandable Intramedullary Nails for Large Diaphyseal Femur Defects in the Sarcoma Patient – Steven Magister

Humeral Lengthening with Intramedullary Retrograde Nailing – A Surgical Technique and a Review of Three Cases – Ulrik Kähler Olesen

Redefining the Juvenile Bunion – Anthony Riccio

Eliminating the Pain Generator may be More Important than the Deformity Correction in Calcaneus Fracture Ainsley Katherine Bloomer

Tandem Use of a Single Magnetic Internal Lengthening Nail for Compound Femoral Lengthening Harold J.P. van Bosse, MD

Regional Nerve Block Decreases Length of Stay in Pediatric Gradual Correction Patients Philip K. McClure, MD

Nonvascularised Fibular Autograft for Reconstruction of Paediatric Bone Defects: An Analysis of 10 Cases Gerard A. Sheridan

Trends and Practices in Limb Lengthening Over 10 Years – A U.S. Database Study – Ashish Mittal

Hexapod Education in Developing Nations – Richard Gellman, MD

Tiered Team Research: A Novel Concept for Increasing Research Productivity in the Academic Setting Vignesh K. Alamanda

Does Anesthesia Choice affect in Hospital Outcomes for Adult Acute Deformity Correction Patients? John E. Herzenberg, MD
Prevalence of Vitamin D Deficiency in Adult Limb Lengthening and Deformity Correction Patients

*John E. Herzenberg, MD*

Accuracy of Virtual Surgical Planning and Custom 3D–printed Osteotomy and Reduction Guides for Acute Correction of Antebrachial Deformities in Dogs – *Christina Carolyn De Armond*

Clinical Observership Opportunities in North America for International Orthopaedic Surgeons

*Sanjeev Sabharwal, MD*