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Guy's and St Thomas'
NHS Foundation Trust

BSCOS

British Society for Children's
Orthopaedic Surgery



ANNUAL MEETING

12th & 13th March

BSCOS-NIHR-RCSNG RESEARCH DAY

11th March



bscosmeeting.com

Welcome from the President

Dear Friends and Colleagues,

It's a real pleasure to welcome you to the BSCOS 2026 Annual Meeting in London on 11th–13th March. Each year, this gathering brings together our community of surgeons, researchers, trainees, and allied health professionals for two days of lively discussion, debate (and socialising!).

With 300+ delegates attending, the meeting is a wonderful chance to learn, exchange ideas, and connect with colleagues old and new.

What can you look forward to?

- A rich scientific programme filled with the latest research, innovations, and updates in paediatric orthopaedics and trauma.
- Opportunities to collaborate - whether in lively discussions, thought-provoking sessions, or casual chats over coffee.
- A vibrant exhibition and networking space, where you can meet industry partners and discover the newest technologies and approaches.
- The Annual Dinner, always a highlight, offering a relaxed evening to enjoy good company and strengthen friendships within the specialty.

We are proud that BSCOS continues to be not just an educational forum, but also a supportive and inspiring community. Your presence and participation make this meeting what it is - an event where we can celebrate achievements, challenge ideas, and look to the future of our specialty together.

On behalf of the Society and Council, thank you for being here. I hope you find these two days stimulating, enjoyable, and memorable.

With best wishes,

Mr Guy Atherton

President, British Society for Children's Orthopaedic Surgery (BSCOS)



bscosmeeting.com

International Faculty



Thomas Dreher
Head Physician
Paediatric
Orthopaedics, Balgrist
University, Zurich,
Switzerland



Marek Jozwiak
Paediatric Orthopaedic
Surgeon – Poznan
University of Medical
Sciences, Wiktor Dega
Orthopaedic and
Rehabilitation Hospital



Nirmal Raj Gopinathan
Paediatric
Orthopaedic Society
of India

Organising Committee



Arash Afsharpad
ELCH Paediatric
Orthopaedic
Consultant



Martin Gough
ELCH & One Small Step
Gait Lab, Paediatric
Orthopaedic Consultant



Dan Reed
ELCH Paediatric
Orthopaedic Consultant



Michail Kokkinakis
ELCH Paediatric
Orthopaedic Consultant &
KCL Honorary Reader



Gavin Spence
ELCH Paediatric
Orthopaedic
Consultant

UK Faculty



Guy Atherton
President, BSCOS



James Barnes
Consultant Paediatric
Orthopaedic Surgeon,
University Hospitals Bristol
NHS Foundation Trust



Simon Bennet
Consultant Paediatric
Orthopaedic Surgeon,
Southampton Children's
Hospital



Stephanie Birch
Patient
Representative



Anna Bridgens
Paediatric Orthopaedic
Consultant, ECLH



Clare Carpenter
Paediatric Orthopaedic
Surgeon, Cardiff and Vale
University Health Board



Stephen Cooke
Paediatric Orthopaedic
Surgeon, University
Hospitals Coventry &
Warwickshire



Sara Dorman
Consultant Orthopaedic
Surgeon, Sheffield
Children's Hospital



Charlie Fairhurst
Head of Children's
Neurosciences, ELCH



Catherine Flanagan
Paediatric Orthopaedics
CNS, Evelina London
Children's Hospital



Rob Freeman
Consultant Orthopaedic
Surgeon, RJA Orthopaedic
Hospital, Oswestry



Adam Galloway
Advanced Practice Clinical
Academic Physiotherapist,
Leeds Children's Hospital



Sara Gargent
Paediatric Orthopaedic
Consultant, Brookfield
Hospital



Yael Gelfer
Paediatric Orthopaedic
Surgeon, St Georges
Hospital NHS Foundation
Trust



Steve Giles
Consultant Orthopaedic
Surgeon and Honorary
Senior Lecturer, Sheffield
University



Richard Grieve
London School of
Hygiene and Tropical
Medicine



Phil Henman
Consultant Orthopaedic
Surgeon, Newcastle



Prof Caroline Hing
Consultant Orthopaedic
Surgeon, St George's
University London

UK Faculty



James Hunter
Queen's Medical Centre,
Nottingham



Melita Irving
Consultant Clinical
Geneticist,
Honorary Reader,
Guy's & St. Thomas'



Alpesh Kothari
Paediatric Orthopaedic
Surgeon, Oxford University
Hospitals NHSFT



Monica Lakhanpaul
UCL Great Ormond
Street Institute of Child
Health



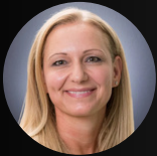
Mark Latimer
Paediatric Orthopaedic
Surgeon, Cambridge,
Honorary Senior
Lecturer Cambridge
University



Lucy Llewellyn-Stanton
Oxford University
Hospitals NHS
Foundation Trust



Sanjeev Madan
Consultant Orthopaedic
Surgeon, Sheffield
Children's Hospital



Claudia Maizen
Consultant Orthopaedic
Surgeon, Royal London
Hospital



Adnan Manzur
Consultant Paediatric
Neurologist, Great
Ormond Street Hospital
for Children



Ben Marson
Paediatric Orthopaedic
Surgeon, University of
Nottingham



Anne McNee
Advanced Physiotherapy
Practitioner in Neuro-
Orthopaedics, Chelsea &
Westminster NHS
Foundation Trust



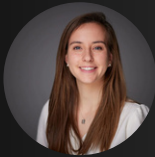
Max Mifsud
Consultant Paediatric
Orthopaedic Surgeon,
Nuffield Orthopaedic
Centre, Oxford



Piers Mitchell
Consultant Orthopaedic
Surgeon, BSCOS Research
Committee Chair



Fergal Monsell
BOA President



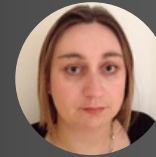
Eileen Morrow
Clinical Academic
Orthotist, Oxford
University Hospitals



Liz Moulder
Consultant Orthopaedic
Surgeon, Hull University
Teaching Hospitals



Claire Murnaghan
Consultant Paediatric
Orthopaedic Surgeon,
Royal Hospital for
Children, Glasgow



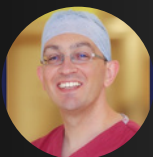
Katy Nicholson
Paediatric Anaesthetist,
Guy's & St Thomas' NHS
Foundation Trust



Nick Nicolaou
Paediatric Orthopaedic
Surgeon, Sheffield
Children's Hospital



Joanne Perkins
Paediatric intensive care
Consultant and Paediatric
Anaesthetic Consultant,
ECLH



Prof Dan Perry
Paediatric Orthopaedic
Surgeon, University of
Liverpool



Khaled Sarraf
Consultant Trauma and
Orthopaedic Surgeon,
St Mary's Hospital



Neil Seagaren
Consultant Paediatric
Orthopaedic Surgeon,
Royal National
Orthopaedic Hospital,
Stanmore



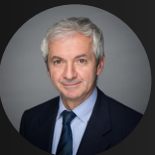
Karen Shepherd
Paediatric Orthopaedic
Consultant, Chelsea &
Westminster Hospital



Adam Shortland
Consultant Clinical
Scientist, One Small
Step Gait Lab,
Guy's & St. Thomas'
Hospital



Christopher Talbot
Consultant Paediatric
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Alder Hey Children's
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Tim Theologis
Consultant Orthopaedic
Surgeon, Oxford University
Hospitals NHS Foundation
Trust



Portia Thorman
Head of Advocacy and
Community
Spinal Muscular Atrophy
UK



Craig Walsh
Advanced Nurse
Practitioner, Oxford
University Hospitals Trust



Nicole Williams
Clinical Psychologist,
Evelina London Children's
Hospital



Chris Wilson
Consultant Orthopaedic
Surgeon, Cardiff



Michael Wright
Consultant Clinical
Geneticist and
Associate
Clinical Lecturer,
Newcastle



Helen Wood
Oxford University



Elizabeth Wraige
Consultant Paediatric
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FEATURES

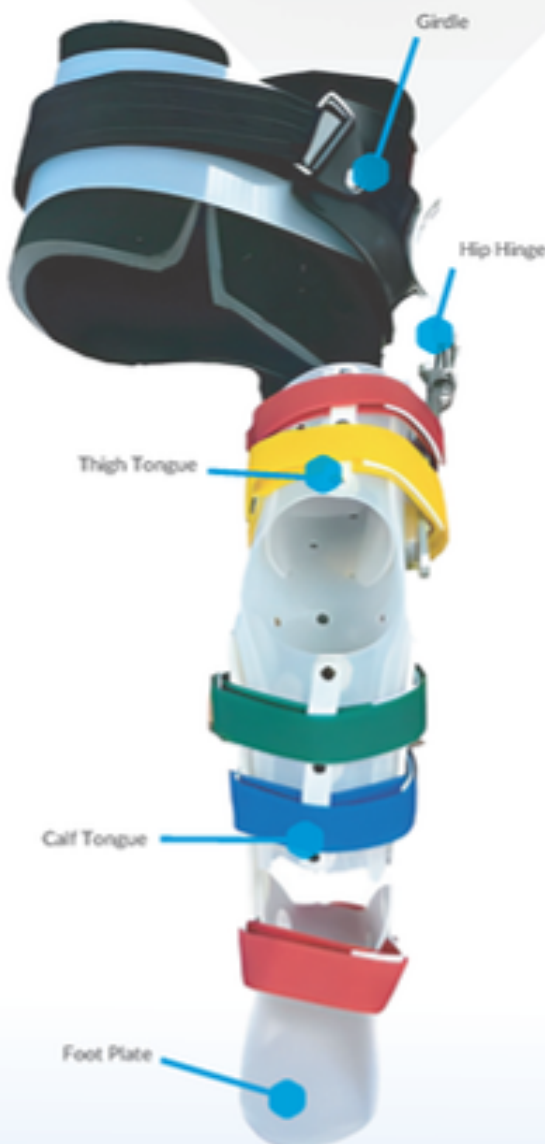
- 6 sizes (XS-XXL)
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 - Brace worn for ~6 weeks
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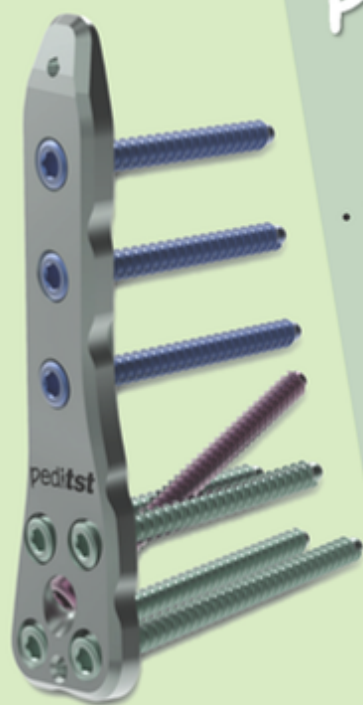
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REGISTRATION TICKETS

BSCOS British Society for Children's Orthopaedic Surgery	CPD certified Industry symposia and exhibition Tea/coffee and lunch breaks Social networking and conference dinner						
	ANNUAL MEETING TWO DAYS ATTENDANCE 12th and 13th March			ANNUAL MEETING SINGLE DAY ATTENDANCE 12th OR 13th March			BSCOS-NIHR- RCSENG RESEARCH DAY 11th March
	EARLY before 11 Jan	MID before 28 Feb	LATE after 1 Mar	EARLY before 11 Jan	MID before 28 Feb	LATE after 1 Mar	
BSCOS MEMBER (CONSULTANTS)	£295	£350	£395	£195	£225	£275	
BSCOS MEMBER - TRAINEES & ALLIED HEALTH PROFESSIONALS (Physiotherapists, Nurse Specialists)	£225	£250	£275	£150	£175	£195	£30 BSCOS-NIHR- RCSENG RESEARCH DAY 1pm - 5.30pm (limited places)
NON MEMBER (CONSULTANTS)	£450	£500	£550	£295	£325	£375	
NON MEMBER - TRAINEES & ALLIED HEALTH PROFESSIONALS (Physiotherapists, Nurse Specialists)	£275	£300	£325	£200	£225	£250	
MEDICAL STUDENTS & FY DOCTORS (evidence required)	£75			£50			
CONFERENCE DINNER & 80s THEMED 'Alive and Kicking' LIVE BAND Thursday 12th March Pullman St Pancras Hotel	£95 (Consultants) £70 (Trainees, AHPs, Medical Students)						

£30
**BSCOS-NIHR-
RCSENG RESEARCH
DAY**
1pm - 5.30pm
(limited places)





Wednesday 11th March - Research Symposium



Regents Park Room

12:00 Registration and Lunch

13:30	Introduction.	Piers Mitchell
13:35	BSCOS research achievements and how to design an NIHR study?	Dan Perry
14:00	An idiot's guide to health economics.	Richard Grieve
14:30	Every child's voice counts: making research matter.	Monica Lakhanpaul
15:00	Emerging research in clinical gait analysis: implications for paediatric orthopaedic practice.	Adam Shortland

15:30 Tea break

Future Research – Contribute to Shaping these Research Applications

16:00	DDH: optimal treatment duration.	Lucy Llewellyn-Stanton
16:15	Bridging priorities and practice: developing funding applications from the clubfoot priority setting project.	Yael Gelfer
16:30	Understanding rehabilitation practices for children with cerebral palsy following gait improvement surgery.	Helen Wood
16:45	Neurodiversity in paediatric orthopaedics – prevalence, implications and opportunities.	Alpesh Kothari

17:00	Launch of the James Lind Alliance for childhood limb fractures.	Ben Marson
17:30	Close	



Thursday 12th March - Annual Meeting

08:00 REGISTRATION

Shaw Theatre

09:00	Welcome	Guy Atherton Dan Reed
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SESSION 1A: NEURODISABILITY ONE - SPINAL MUSCULAR ATROPHY

Orthopaedic Management of children with SMA. A changed landscape.

Chairs: Elizabeth Wraige and Michail Kokkinakis

09:05	Disease modifying therapies in SMA. A changed landscape.	Adnan Manzur
09:12	Orthopaedic management of children with SMA. UK Guidelines.	Michail Kokkinakis
09:19	The SMA family's perspective.	Portia Thorman (Virtual)
09:30	Discussion	
09:35	Orthopaedic management of children with SMA in Scotland.	Claire Murnaghan
09:42	Risk factors of independent gait in SMA patients with special attention to knee position and the role of hamstrings.	Marek Jozwiak
09:49	Orthopaedic Surgeon's current approaches in SMA. A survey of EPOS members from 32 countries.	Anna Bridgens
09:57	Discussion	

SESSION 1B: NEURODISABILITY ONE - PERIOPERATIVE CARE

Perioperative care in complex neurodisability orthopaedics

Chair: Martin Gough

10:05	Neurodisability orthopaedics perioperative MDT: it takes a village.	Joanne Perkins Katy Nicholson
10:20	Discussion	



Thursday 12th March - Annual Meeting

10:30 COFFEE | INDUSTRY EXHIBITION | POSTERS (NOBEL SUITE)

Shaw Theatre

SESSION 2A: CP CARE FRAMEWORKS & RESEARCH UPDATES.

Chairs: Helen Chase

11:00	NHS Commissioning framework for children and young people with cerebral palsy.	Charlie Fairhurst (Virtual)
11:10	Improving orthopaedic services for children with CP in the NHS.	Stephen Cooke
11:20	NIHR research update.	Dan Perry
11:35	CRAFT update.	Dan Perry
11:50	PICBONE study results.	Tim Theologis

SESSION 2B: FREE PAPERS

4 papers - 4 minutes presentation and 2 minutes questions immediately after each paper. Please refer to full abstracts of each paper at the back of this programme.

Chairs: Anish Sanghrajka

12:05	(27) Enhanced Recovery After Surgery (ERAS) pathways versus Conventional care of children undergoing surgery for Developmental Dysplasia of Hip - A non-inferiority Randomized Controlled Trial. Akash Ghosh^{1,2}, Nirmal Raj Gopinathan¹ ¹PGIMER, Chandigarh, India. ²Sheffield Children's Hospital, Sheffield, United Kingdom
12:11	(10) Predicting Clubfoot Recurrence Through Evertor Muscle Assessment: A Prospective Study. Aditya Kaduvally Suresh, Vivek Singh, Ramapriya Yasam All India Institute of Medical Sciences, Rishikesh, India



Thursday 12th March - Annual Meeting

Shaw Theatre

SESSION 2B: FREE PAPERS

4 papers - 4 minutes presentation and 2 minutes questions immediately after each paper. Please refer to full abstracts of each paper at the back of this programme.

Chairs: Anish Sanghrajka

12:17	(67) Radiological outcomes in the Children's Radius Acute Fracture Fixation Trial (CRAFTT). Sylvia Misztal^{1,2}, Joanna Craven^{3,4}, Daniel Perry^{3,2} ¹Edge Hill University, Liverpool, United Kingdom. ²Alder Hey Children's Hospital, Liverpool, United Kingdom. ³University of Liverpool, Liverpool, United Kingdom. ⁴Wales Deanery, Wales, United Kingdom
12:23	(39) Outcomes at Skeletal Maturity of a Technique of Closed Reduction and Short Leg Spica Cast in 85 Hips. Bhushan Sagade¹, Peter Calder¹, Aresh Hashemi-Nejad¹, Deborah Eastwood^{1,2}, Sally Tennant¹ ¹Royal National Orthopaedic Hospital, London, United Kingdom. ²Great Ormond Street Hospital, London, United Kingdom

SESSION 2C: ORTHOPEDIATRICS INDUSTRY SYMPOSIUM



12:30	DF2 femoral fracture brace role in a Level 1 trauma centre.	Andy McBride
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13:00 LUNCH | INDUSTRY EXHIBITION | POSTERS (NOBEL SUITE)

SESSION 3A: BOA, FLATFEET

14:00	British Orthopaedic Association update.	Fergal Monsell BOA President
14:15	Management of paediatric flexible flatfoot in the UK. A BSCOS Delphi consensus study.	Eileen Morrow



ANNUAL MEETING

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Thursday 12th March - Annual Meeting

Shaw Theatre

SESSION 3B: CONTROVERSIES IN SCFE MANAGEMENT: A DEBATE

Chairs: James Barnes and Michail Kokkinakis

DEBATE ONE: Is acute, unstable SCFE a surgical emergency?

- 14.30** Introduction and polling. **Michail Kokkinakis**
14.34 Emergency closed reduction using Leadbetter manoeuvre. **Simon Bennet**
14.39 Emergency open reduction using Parsch technique. **James Barnes**
14.42 Open Reduction using 2 weeks of immobilisation with sprigs and slings and performing fish osteotomy. **Neil Segaren**
14.47 Open reduction utilising modified Dunn osteotomy via Ganz hip surgical dislocation. **Max Mifsud**

14.52 DISCUSSION

DEBATE TWO: Pinning in situ or sub-capital osteotomy for stable, severe SCFEs?

- 15.02** Pin in situ is safe but is it the best option? **Simon Bennet**
15.07 Successful sub-capital osteotomy and open reduction promises good results but is it worth the risk? **Christopher Talbot**

DEBATE THREE:

- 15.12** How to best manage symptomatic SCFE, which has previously been pinned in situ? **James Barnes**

15.20 DISCUSSION

Panel:

Simon Bennet
Max Mifsud
Neil Segaren
Christopher Talbot

SESSION 3C: INTERNATIONAL GUEST LECTURE

15:30

Modified trochanteric triplane osteotomy for chronic moderate to severe slipped capital femoral epiphysis.

Nirmal Raj Gopinathan

15:45 TEA | INDUSTRY EXHIBITION | POSTERS (NOBEL SUITE)

Thursday 12th March - Annual Meeting

Shaw Theatre

SESSION 4A: FREE PAPERS

4 papers - 4 minutes presentation and 2 minutes questions immediately after each paper.
Please refer to full abstracts of each paper at the back of this programme.

Chairs: Karen Shepherd

16:15	(35) Governance for surgery for developmental dysplasia of the hip- learning from the first regional peer-review audit in the UK. Anish Sanghrajka¹, Elizabeth Ashby², Pranai Buddhdev³, Mariusz Chomicki², East of England DDH Collaborators⁴ ¹Great Ormond Street Hospital for Children, London, United Kingdom. ²Cambridge University Hospitals, Cambridge, United Kingdom. ³Broomfield Hospital, Mid & South Essex Hospitals, Chelmsford, United Kingdom. ⁴East of England ODN, Cambridge, United Kingdom
16:21	(42) Active surveillance versus abduction bracing for Graf IIb DDH: residual dysplasia at 2 year follow-up. Wesley W.E.S. Theunissen¹, Marieke C. van der Steen^{1,2}, Britt J.M.H. Dörssers¹, Sander M.J. van Kuijk³, Marianne A. Witlox³, Arnold T. Besselaar¹, Florens Q.M.P. van Douveren¹, Jaap J. Tolk⁴ ¹Maxima Medical Centre, Eindhoven, Netherlands. ²Catharina Hospital, Eindhoven, Netherlands. ³Maastricht University Medical Centre+, Maastricht, Netherlands. ⁴Erasmus MC - Sophia Children's Hospital, Rotterdam, Netherlands
16:27	(25) Remodelling after percutaneous pinning for Slipped Capital Femoral Epiphysis; The influence of transphyseal screw position. Joeri Slobbe, Cornelis L.P. van de Ree, Johannes H.J.M. Bessems, Jaap J. Tolk Erasmus MC - Sophia Children's Hospital, Rotterdam, Netherlands
16:33	(23) Reliability of reporting of AP radiographs in the assessment and management of DDH, the need for a standardised template? Maren Williams¹, Danielle Miles², Carla Nightingale², Hannah Carter², Jevan Williams³, Louise Daniels², Louise Williams², Rory MacNair⁴, Tishi Ninan², Simon Humphrys⁵, Owen Bodger⁶, Paul Williams² ¹Cardiff University, School of Medicine, Cardiff, United Kingdom. ²Swansea Bay University Health Board, Swansea, United Kingdom. ³Royal Devon University Healthcare NHS Foundation Trust, Exeter, United Kingdom. ⁴Hywel Dda University Health Board, Camarthen, United Kingdom. ⁵Cardiff and Vale University Health Board, Cardiff, United Kingdom. ⁶Swansea University, Swansea, United Kingdom



**ANNUAL
MEETING**
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Thursday 12th March - Annual Meeting

Shaw Theatre

SESSION 4B: NEURODISABILITY TWO - HIP SURGERY

Hip surgery in neurodisability: a mini symposium

Chairs: Dan Reed and Claudia Maizen

16:40	The use of Dega pelvic osteotomy in various hip joint deformities in cerebral palsy.	Marek Jozwiak
17:05	Hip surgery in neurodisability – new frontiers.	Thomas Dreher
17:30	Discussion	

17:40	Day one close.
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19:30 CONFERENCE DINNER (entry by pre-purchased ticket) - Nobel Suite

DRESS CODE: Smart Casual / 1980s theme encouraged

AFTER DINNER & 80s THEMED LIVE BAND: 'Alive and Kicking'

23:45 - close



Friday 13th March - Annual Meeting

Shaw Theatre

SESSION 5-1: BSCOS AGM & UPDATES

08:30	Annual General Meeting - BSCOS Ordinary, Honorary, Overseas and Associate Members only.	Guy Atherton
09:15	Travelling Fellowship report (5 mins.) Travelling Fellowship report (5 mins.)	Alpesh Kothari Anna Bridgens
09:25	BSCOS Consensus group updates.	Yael Gelfer
09:35	James Lind Alliance childhood limb fractures: progress so far.	Ben Marson
09:45	BSCOS Global outreach group.	Sara Dorman
09:55	Congenital insensitivity to pain - BSCOS survey.	Nihal Basha

10:15 COFFEE | INDUSTRY EXHIBITION | POSTERS (NOBEL SUITE)



Friday 13th March - Annual Meeting

Regents Park Room

SESSION 5-II (PARALLEL): BSCOS ALLIED HEALTH PROFESSIONALS AGM

Chair: Adam Galloway

08:30	Introduction.	Adam Galloway
08:35	BSCOS AHP Bursary presentation.	Craig Walsh
08:45	Toe walking and fixed contractures: where are we right now? - Delphi consensus – focus on areas of fixed contracture and non-surgical intervention. - Pathways of care in our different organisations. - Serial casting in ASD : preliminary data from Chelsea and Westminster Hospital and RNOH. - SIG: aims and objectives and highlight the next meeting.	Anne McNee and Christine Douglas
09:30 - 10:15	Panel discussion: importance of psychology in paediatric orthopaedics.	Catherine Flanagan Shola Yissau Nicole Williams

10:15 COFFEE | INDUSTRY EXHIBITION | POSTERS (NOBEL SUITE)



Friday 13th March - Annual Meeting

Shaw Theatre

SESSION 6A: SKELETAL DYSPLASIA

Skeletal dysplasia for the general paediatric orthopod

Chair: Gavin Spence

10:45	Achondroplasia in the UK, past, present and future.	Michael Wright
11:00	New horizons in achondroplasia – will orthopaedic surgeons be out of a job?	Melita Irving
11:15	Modern orthopaedic service for skeletal dysplasia – how I do it?	Mark Latimer
11:30	Orthopaedic treatment in Achondroplasia – the patients' voice.	Steph Birch
11:45	Discussion.	

SESSION 6B: LAVENDER MEDICAL INDUSTRY SYMPOSIUM



12:00 - 12:20	Correcting Flatfoot Deformities	Steven Fee Alvaro Gondar
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12:20 LUNCH | INDUSTRY EXHIBITION | POSTERS (NOBEL SUITE)

Friday 13th March - Annual Meeting

Regents Park Room (limited places)

LUNCHTIME BREAKOUT - FREE PAPERS - MED STUDENTS/FY DOCTORS

13 papers - 4 minutes presentation and 1 minute questions immediately after each paper.
Please refer to full abstracts of each paper at the back of this programme.

Chair: Clare Carpenter

12:00	Introduction	Clare Carpenter
12:05	(15) The Role of Perfusion MRI in Detecting Avascular Necrosis of the Femoral Head in Children: A Systematic Review. Nikhil Manoj¹, Jade Yip¹, Anna Bridgens², Anshul Rastogi², Martin Siebachmeyer², Marc Huttman¹, Yael Gelfer² ¹City St George's, University of London, London, United Kingdom. ²St. George's Hospital, London, United Kingdom	
12:10	(5) Long-Term Outcomes Following Treatment for Congenital Talipes Equinovarus (CTEV): A Service Evaluation Using Patient-Reported Outcome Measures Jules Dervelle¹, Adam Galloway^{1,2}, Laura Deriu^{1,2} ¹University of Leeds, Leeds, United Kingdom. ²Leeds Children's Hospital, Leeds, United Kingdom	
12:15	(7) Shaping growth efficiently: Implementation of a day-case protocol for hemiepiphysiodesis in a large UK teaching hospital. Vasavi Tadikamalla, Akhilesh Pradhan, Ananth Srinivasan, Talha Ahmad, Anna C Peek University Hospitals of Leicester, Leicester, United Kingdom	
12:20	(14) Outcomes after surgical correction of miserable malalignment syndrome: a single-centre service evaluation. Felice Lawrence^{1,2}, Darius Rad¹ ¹Southampton Children's Hospital, Southampton, United Kingdom. ²University of Southampton, Southampton, United Kingdom	
12:25	(8) The Psychosocial Impact of Patellofemoral Dislocation and Anterior Cruciate Ligament (ACL) Injury in Children and Adolescents: A Systematic Review and Thematic Analysis. Pichamon Eiamampai¹, Emma Akhaei¹, Neel Badhe², Wen Xian Low³, Stephen McDonnell², Ignatius Liew², Ben Marson⁴ ¹University of East Anglia, Norwich, United Kingdom. ²University of Cambridge, Cambridge, United Kingdom. ³East Suffolk and North Essex NHS Foundation Trust, Ipswich, United Kingdom. ⁴University of Nottingham, Nottingham, United Kingdom	

Friday 13th March - Annual Meeting

Regents Park Room (limited places)

LUNCHTIME BREAKOUT - FREE PAPERS - MED STUDENTS/FY DOCTORS

13 papers - 4 minutes presentation and 1 minute questions immediately after each paper.
Please refer to full abstracts of each paper at the back of this programme.

Chair: Clare Carpenter

12:30	(11) A qualitative study to determine the acceptability of a family education tool in the referral pathway of normal variants in children's orthopaedic surgery: using Sever's disease as an exemplar 'normal variant'. Jacqueline Oien¹, Daniel Perry^{1,2}, Adam Galloway³ ¹University of Liverpool, Liverpool, United Kingdom. ²Alder Hey Children's Hospital, Liverpool, United Kingdom. ³Leeds Teaching Hospitals NHS Trust, Leeds, United Kingdom
12:35	(13) Cast Forward: Speeding Up Clubfoot Correction with Accelerated Ponseti Casting in Mid & South Essex. Erin Flaherty, Helen Gille, Emma Nash, Sara Gargent, Kakra Wartemberg, Pranai Buddhdev Broomfield Hospital, Chelmsford, United Kingdom
12:40	(16) Universal Provision of Limbo Waterproof Protectors: A Charitable Pilot in NHS Grampian. Elena Torres, Mike Reidy Royal Aberdeen Children's Hospital, Aberdeen, United Kingdom
12:45	(28) Paediatric Meniscal Injuries: Re-evaluation of Surgical Management Against GIRFT Guidelines in a Tertiary Paediatric Centre. Chloe McGrath¹, Sneha Thomas¹, Sean Scattergood¹, John Jeffery¹, Simon Thomas² ¹Bristol Childrens Hospital, Bristol, United Kingdom. ²Bristol Childrens Hospital, Bristol, United Kingdom
12:50	(9) South West Audit of Paediatric ACLs (SWAP-ACL). Sneha Sarah Thomas¹, Sean Scattergood², John Jeffery² ¹University of Southampton, Southampton, United Kingdom. ²University Hospitals Bristol and Weston NHS Trust, Bristol, United Kingdom
12:55	(12) Outcomes of internal fixation for osteochondritis dissecans of the skeletally immature knee: systematic review and meta-analysis. Bavin Pathmaraj¹, Dillan Dhanak², Kaivalya Bhagat², Kavindu Rathnayake², Minoran Satkunanathan², Victor Lu³, Tak Man Wong⁴ ¹Chelsea and Westminster Hospital NHS Trust, London, United Kingdom. ²UCL Medical School, London, United Kingdom. ³Chinese University of Hong Kong, Hong Kong, China. ⁴University of Hong Kong, Hong Kong, China



Friday 13th March - Annual Meeting

Regents Park Room (limited places)

LUNCHTIME BREAKOUT - FREE PAPERS - MED STUDENTS/FY DOCTORS

13 papers - 4 minutes presentation and 1 minute questions immediately after each paper.
Please refer to full abstracts of each paper at the back of this programme.

Chair: Clare Carpenter

13:00	(26) Efficacy of Preoperative Multidisciplinary Team (MDT) Planning in Complex Paediatric Orthopaedic Cases: Optimising PICU Bed Allocation and Minimising Unplanned Admissions. Varun Ambagade, Isha Hazarey, Luzie Maier-Hasselmann, Lucy Kallmeier, Catherine Flanagan, Shola Yissau, Joanne Perkins, Daniel Reed, Katy Nicholson Evelina London Children's Hospital, London, United Kingdom	
13:05	(19) Genomic Susceptibility to Anterior Cruciate Ligament Injury: A Systematic Review. Jessica Treves⁴, Dave Osinachukwu Duru¹, David Kwan Ryung Lee¹, Syed Zain Jafri², Wen Xian Low³, Ignatius Liew⁴ ¹University of Cambridge, Cambridge, United Kingdom. ²University of East Anglia, Norwich, United Kingdom. ³East Suffolk and North Essex NHS Foundation Trust, Colchester, United Kingdom. ⁴Department of Trauma and Orthopaedics, Cambridge University Hospital, Cambridge, United Kingdom	
13:10	Medical Student BSCOS Bursary presentation: Paediatric Orthopaedics in Aoteroa: Lessons from a surgical elective.	Pete Atherton
13:15 - 13:30	Discussion and closing remarks.	Clare Carpenter

Friday 13th March - Annual Meeting

Shaw Theatre

SESSION 7A: FREE PAPERS

5 papers - 4 minutes presentation and 2 minutes questions immediately after each paper.
Please refer to full abstracts of each paper at the back of this programme.

Chairs: Sara Gargent

13:30	(43) Static standing frames facilitate greater weight-bearing than dynamic frames in non-ambulant children with neurodisability. <u>Miray Kirolos</u>¹, Clare Carpenter², Angela Kedgley¹ ¹Imperial College London, London, United Kingdom. ²University Hospital of Wales, Cardiff, United Kingdom
13:36	(45) A Retrospective Cohort Study In Outcomes Of Paediatric Forearm Fractures When Manipulated Under General Anaesthetic or Ketamine vs Intra-nasal Fentanyl. <u>Rhys Luckwell</u>¹, Joseph Beeney², Deepika Pinto¹, Oliver Lane¹, Clare Carpenter¹ ¹University Hospital of Wales, Cardiff, United Kingdom. ²Cardiff University, Cardiff, United Kingdom
13:42	(8) Arthroscopic-Assisted Shoulder Rebalancing in Birth Brachial Plexus Injuries: A Prospective Study <u>Vivek Singh</u>, Aditya KS, Rahul Mishra All India Institute of Medical Sciences, Rishikesh, India
13:48	(20) Patient-Reported Outcome Measures for Limb Reconstruction Surgery in Children: Which one should you use? <u>Josie Carnew</u>, Kelly Hughes, Deborah Jackson Great Ormond Street Hospital for Children, London, United Kingdom
13:54	(30) Preoperative Ultrasound in Paediatric Supracondylar Fracture-Related Nerve Injuries: Diagnostic Accuracy and Surgical Correlation Amin Abukar, Nimalesh Yogarajah, Kapil Sugand, Ian Pressney, Anna Panagiotidou, Marco Sinisi, Ashley Simpson, Michael Fox, <u>Pablo Alfonso Palanca</u> Peripherap Nerve Injury Unit, Royal National Orthopaedic Hospital, London, United Kingdom



Friday 13th March - Annual Meeting

Shaw Theatre

SESSION 7B: GIRFT & GOVERNANCE

14:00	GIRFT Update	James Hunter
14:15	Invited College Reviews - general insights.	Steve Giles Liz Moulder
14:40	Governance of complex paediatric orthopaedic surgery - update and discussion.	Guy Atherton Phil Henman Rob Freeman

SESSION 7C: FUN THINGS TO LOOK FORWARD TO

15:05	BSCOS Current Concepts Course 2026	Alpesh Kothari
15:10	BSCOS & BLRS 2027	Sanjeev Madan
15:15	Prizes - Best Podium Paper, Best Poster and Best Medical Student / FY Doctor Podium Paper.	Guy Atherton

15:20 TEA | INDUSTRY EXHIBITION | POSTERS (NOBEL SUITE)



Friday 13th March - Annual Meeting

Shaw Theatre

SESSION 8A: PAEDIATRIC KNEE – BEYOND SPORTS

Paediatric knee beyond sports – levers, muscles and malalignment

Chair: Arash Afsharpad

15:45	Femoral anteversion – is coronal alignment a separate entity to torsional alignment?	Chris Wilson
15:55	Tibial torsion – why it matters and when to intervene?	Arash Afsharpad
16:05	Distal patella realignment (when misery intensifies).	Khaled Sarraf
16:15	Trochlea dysplasia (extreme misery / no man's land).	Caroline Hing
16:25	Malalignment complicated by soft tissue misery (MPFL, MQTFL, MPTL & MPML).	Nicolas Nicolaou
16:35	Gait analysis (dissecting and understanding misery).	Adam Shortland
16:45	Panel / case discussion.	

SESSION 8B: PRESIDENTIAL HANDOVER & PRIZES

17:00	Presidential handover.	Guy Atherton Phil Henman
17:05	Meeting close.	

POSTERS DISPLAY

Nobel Suite & Foyer

POSTER DISPLAY #1	(11) Prevalence and Determinants of Proximal Femoral Growth Alterations in Developmental Dysplasia of the Hip: A Prospective Analysis Study <u>Aditya Kaduvally Suresh</u>, Vivek Singh All India Institute of Medical Sciences, Rishikesh, India
POSTER DISPLAY #2	(17) Current practices in imaging for children with lower limb rotational deformity: results of a UK wide survey of children's orthopaedic surgeons and literature review <u>Laura Clifton</u>, Ling Lee Sunderland Royal Hospital, Sunderland, United Kingdom
POSTER DISPLAY #3	(19) Which outcomes should we measure? A qualitative interview study contributing to the development of a core outcome set for children's elective lower limb orthopaedic surgery <u>Eileen Morrow</u>¹, Esther Williamson¹, Chris Morris², Sally Hopewell¹, Tim Theologis¹ ¹NDORMS, University of Oxford, Oxford, United Kingdom. ²PenCRU, University of Exeter, Exeter, United Kingdom
POSTER DISPLAY #4	(24) When do dislocated hip reduce in Pavlik harness? Prospective Evaluation of Time to Reduction Using Serial Transinguinal Ultrasound: The RETURN Study Hesther A. Oldenkamp, Suzanne de Vos - Jakobs, <u>Jaap J. Tolk</u> Erasmus MC - Sophia Children's Hospital, Rotterdam, Netherlands
POSTER DISPLAY #5	(31) Longitudinal observation of forearm deformity and functional impact of Type V Osteogenesis Imperfecta <u>Balakumar Balasubramanian</u>, Sheeraz Iqbal, Nicolas Nicolaou, Stephen Giles, Jamed Fernandes Sheffield Childrens Hospital, Sheffield, United Kingdom
POSTER DISPLAY #6	(32) Femoral Brace and Hip Spica Casting: A Retrospective Comparative Cohort Study of Clinical Outcomes and Economic Burden in Paediatric Femoral Shaft Fractures <u>Aebel Raju</u>, Akhilesh Pradhan, Ananth Srinivasan, Colin McDonald, Suresh Annamalai, Randeep Aujla, Anna Peek University Hospitals of Leicester, Leicester, United Kingdom
POSTER DISPLAY #7	(36) The CLUBFIT Study: Evaluation of Cardiorespiratory Fitness and Ankle Flexibility in Children with Ponseti-Treated Clubfoot. <u>Christine Douglas</u>, Sally Tennant, Rokhsaneh Tehrani The Royal National Orthopaedic Hospital, Stanmore, United Kingdom

POSTERS DISPLAY

Nobel Suite & Foyer

POSTER DISPLAY #8	(37) Paediatric Lateral Humeral Condyle Fractures in Wales: A National Multi-centre Evaluation of Operative Management Deepika Pinto¹, Francesca Solari², Ioan Hughes³, Emma Taylor², Vinay Joseph⁴, Aly Pathan⁵, Lydia Fitzmaurice-James⁶, Jessica Potter², Sujit Kadambande² ¹Cardiff and Vale University Health Board, Cardiff, United Kingdom. ²Aneurin Bevan University Health Board, Newport, United Kingdom. ³Swansea Bay University Health Board, Swansea, United Kingdom. ⁴Hywel Dda University Health Board, Carmarthen, United Kingdom. ⁵Betsi Cadwaladr University Health Board, Wrexham, United Kingdom. ⁶Betsi Cadwaladr University Health Board, Bodelwyddan, United Kingdom
POSTER DISPLAY #9	(38) Artificial Intelligence-Assisted Cine Sweep Video Hip Ultrasound Screening For Diagnosis Of Developmental Dysplasia Of The Hip - A Feasibility Study Bhushan Sagade¹, Shalin Shah¹, Shenbaghavalli Thanikai¹, Pandiyarajan E¹, Abhilash Hareendranathan², Adam McArthur², Dornooosh Zoonobi³, Sukhdeep Dulai², Jacob Jaremko², Alaric Aroojis¹ ¹Bai Jerbai Wadia Hospital for Children, Mumbai, India. ²University of Alberta, Edmonton, Canada. ³Medo.ai Inc, Singapore, Singapore
POSTER DISPLAY #10	(41) To Remove or Retain? Prevalence of Complications Related to Plate Removal and Retention in Paediatric Diaphyseal Forearm Fractures: A Systematic Review and Meta-Analysis Andrew Ting^{1,2,3}, Priyanshu Saha¹, Bassil Azam¹ ¹NDORMS, University of Oxford, Oxford, United Kingdom. ²Imperial College London, London, United Kingdom. ³East and North Hertfordshire NHS Trust, Stevenage, United Kingdom
POSTER DISPLAY #11	(60) The impact of early paediatric anterior cruciate ligament reconstruction on the intra-articular development of the knee in congenital lower limb deficiencies with ACL agenesis Sheeraz Iqbal¹, Neel Dalal², Nicolas Nicolaou¹ ¹Sheffield Children's Hospital, Sheffield, United Kingdom. ²University Hospital North Midlands, Stoke-on-Trent, United Kingdom
POSTER DISPLAY #12	(62) Developmental Dysplasia of the Hip (DDH) Post-operative Avascular Necrosis (AVN) Classification Systems: Descriptive but not Prognostic? Matilda Money¹, Sheng-Chieh Lo¹, Alexander Aarvold² ¹University of Southampton, Southampton, United Kingdom. ²Southampton Children's Hospital, Southampton, United Kingdom
POSTER DISPLAY #13	(66) The Use of Diboterminal Alfa (rhBMP-2) in the Treatment of pseudoarthrosis and non-unions in the Treatment of Paediatric Patients: The Severn Experience. P Atherton¹, MT Stoddart¹, E Mounsey², A McBride¹ ¹Bristol Royal Hospital for Children, Bristol, United Kingdom. ²Musgrove Park Hospital, Taunton, United Kingdom

POSTERS DISPLAY

Nobel Suite & Foyer

POSTER DISPLAY #14	(68) Radiological Outcomes from the SCIENCE study: Surgery versus Casts for Medial Epicondyle Fractures in Children <u>Maheshi Wijesekera</u>^{1,2}, Rusul Shakir Yonis³, Joanna Craven¹, Alex Zimmermann⁴, Daphne Kounali⁴, Daniel C Perry^{1,5} ¹University of Liverpool, Liverpool, United Kingdom. ²SpR, North Yorkshire, United Kingdom. ³Central Middlesex Hospital, London, United Kingdom. ⁴University of Oxford, Oxford, United Kingdom. ⁵Alderhey Children's Hospital, Liverpool, United Kingdom
POSTER DISPLAY #15	(71) Fractured Femur In Young People With Duchenne Muscular Dystrophy: Characteristics, Management And Follow-up <u>Victoria Wilson</u>, Sarah Brown, Rebecca Hart, Jennifer Dunne, Iain Horrocks, Shuku Joseph, Janet McCaul, Jarod Wong Royal Hospital for children, Glasgow, United Kingdom
POSTER DISPLAY #16	(74) The Use of Intra-Operative CT Scanning for Developmental Dysplasia of the Hip <u>Graeme Wilson</u>, James Redfern, Samantha Lane, Tom Hughes, Harvey George Alder Hey Children's Hospital, Liverpool, United Kingdom
POSTER DISPLAY #17	(61) Growth modulation for combined bony and ligamentous deformities around the knee in Achondroplasia <u>Varun Parnami</u>¹, Sujika Ranmuthuge¹, Vinay Shah², Ishani Shah¹, James Fernandes³, Steve Giles³ ¹Royal Manchester Children's Hospital, Manchester, United Kingdom. ²Great Ormond Street Hospital, London, United Kingdom. ³SCH, Sheffield, United Kingdom



**ANNUAL
MEETING**

12th & 13th March

BSCOS-NIHR-RCS-ENG RESEARCH DAY

11th March

PODIUM FREE PAPERS ABSTRACTS

Arthroscopic-Assisted Shoulder Rebalancing in Birth Brachial Plexus Injuries: A Prospective Study

Vivek Singh, Aditya KS, Rahul Mishra
All India Institute of Medical Sciences, Rishikesh, India

Full Abstract

Background:

Shoulder deformities and impaired function in children with birth brachial plexus injury (BBPI) often result from internal rotation (IR) contracture and abductor weakness, which may progress to glenohumeral dysplasia. Subscapularis-complex release and tendon transfer are well-established procedures for improving function; however, the ideal management of shoulder contractures, particularly in preschool-aged children, remains controversial. This study evaluates the functional outcomes of arthroscopic-assisted shoulder rebalancing in BBPI.

Methods:

Twelve children with shoulder contractures and functional deficits, specifically loss of shoulder abduction and external rotation but preserved deltoid function, were prospectively enrolled. All underwent arthroscopy-assisted subscapularis-complex release combined with conjoint muscle transfer to the infraspinatus insertion on the humeral head. Functional assessment was performed using the Mallet scoring system, and range of motion (ROM) was recorded preoperatively and at six months postoperatively. Statistical analysis was conducted to evaluate the significance of changes and correlation with Narakas grading.

Results:

The mean age of participants was 4.83 ± 2.1 years. The average preoperative Mallet score of 14.08 ± 1.4 improved to 23.83 ± 1.2 postoperatively ($p < 0.05$). The mean gain in shoulder abduction was $66.4 \pm 5.6^\circ$, and external rotation improved by $85.4 \pm 16.6^\circ$ at a mean follow-up of 18 months. All patients demonstrated enhanced functional performance and cosmetic improvement. A statistically significant correlation ($p = 0.037$) was observed between Narakas grading and functional outcomes, suggesting better results in lower-grade injuries.

Conclusion:

Arthroscopic-assisted subscapularis-complex release combined with conjoint tendon transfer provides a balanced and minimally invasive approach to restoring shoulder motion in children with BBPI. This combined technique effectively improves abduction and external rotation while minimizing soft-tissue trauma. Long-term studies are warranted to assess durability and growth-related remodeling of the glenohumeral joint.

Abstract Keywords:

Arthroscopic release; Birth brachial plexus injury; Internal rotator contracture; Preschool; Sever-L'Episcopo procedure; Soft tissue procedure

Conflict of Interest:

None

Predicting Clubfoot Recurrence Through Evertor Muscle Assessment: A Prospective Study

Aditya Kaduvally Suresh, Vivek Singh, Ramapriya Yasam
All India Institute of Medical Sciences, Rishikesh, India

Full Abstract

Background

Although the initial correction of idiopathic clubfoot through casting and bracing is often successful, recurrence continues to pose a notable clinical challenge, with rates reported to be between 14% and 40%. While several etiological factors have been implicated, the influence of foot evertor muscle function and the potential benefits of its stimulation remain insufficiently explored. This study aimed to evaluate the role of evertor muscle activity in recurrent clubfoot using clinical, ultrasonographic, and electromyographic assessments.

Methods

A prospective cohort study was performed at a tertiary care centre between 2022 and 2024. Collected parameters included demographic details, Pirani and Dimeglio scores, clinical grading of evertor muscle activity, sonographic cross-sectional areas (CSA) of leg muscles, and surface EMG findings assessing evertor function. All parameters were recorded at predefined follow-up intervals.

Results

Fifty-one children (51 feet) were evaluated, demonstrating an overall recurrence rate of 27.5% (14/51). Among these, 47% (24/51) presented with mild or poor clinical evertor activity, and 58% (14/24) experienced recurrence. A significant correlation was found between weak evertor activity and recurrence ($p = 0.01$). The evertor CSA ratio, motor unit potentials, and recruitment were reduced in recurrent cases, with the CSA ratio being the only parameter reaching statistical significance ($p = 0.02$).

Conclusion

Evertor muscle weakness emerges as a key determinant of clubfoot recurrence. Early identification of deficient evertor activity may enable individualized treatment planning and proactive follow-up to reduce the risk of recurrence. Integration of evertor function assessment into routine clinical evaluation is recommended. Further research should focus

on the efficacy of targeted evetor strengthening and neuromuscular stimulation in minimizing recurrence rates.

Patient-Reported Outcome Measures for Limb Reconstruction Surgery in Children: Which one should you use?

Josie Carnew, Kelly Hughes, Deborah Jackson
Great Ormond Street Hospital for Children, London, United Kingdom

Full Abstract

Background:

Limb reconstruction is an important tenet of paediatric orthopaedic surgery, encompassing a range of surgical procedures from simple osteotomies with internal fixation to complex lengthening and deformity correction using external fixation. Whilst the overarching aim of these surgeries is to improve limb function and patient quality of life, the use of patient-reported outcome measures (PROMs) in clinical practice remains limited. The purpose of this study was to investigate which of the available PROMs is most suitable for use with this patient group in a UK-NHS centre.

Methodology:

The ICF framework was adapted specifically for lower limb deformities to understand the health-related domains affected by this condition. A review of the existing literature was conducted to identify the relative importance of these domains to patients, their families and multidisciplinary clinicians when evaluating surgical outcomes. Five validated outcome measures (Limb-Q KIDS, GOAL-LD, ASK, Oxford Foot & Ankle and PODCI) were then analysed against these importance-weighted, adapted ICF domains to assess how well they address the needs of children with lower limb deformities on a reconstruction pathway.

Results:

The literature identified several key health-related domains for importance-weighting relevant to outcome evaluation in this population: pain, mobility, exercise tolerance / fatigue, assistive devices, social function, psychological wellbeing, self-esteem/appearance, treatment goals and participation in sport. Of the five outcome measures analysed, the GOAL-LD captures these domains most comprehensively in the widest range of the paediatric population.

Conclusions:

Our study shows that of the available PROMs for paediatric limb reconstruction surgery, GOAL-LD was the most effective in addressing the health-related needs, treatment goals

and surgical outcomes of children with lower limb deformities. We would recommend the use of GOAL-LD for surgeons and clinical teams looking to objectively plan and assess the outcomes of treatment for a child undergoing a limb-reconstruction type procedure.

Reliability of reporting of AP radiographs in the assessment and management of DDH, the need for a standardised template?

Maren Williams¹, Danielle Miles², Carla Nightingale², Hannah Carter², Jevan Williams³, Louise Daniels², Louise Williams², Rory MacNair⁴, Tishi Ninan², Simon Humphrys⁵, Owen Bodger⁶, Paul Williams²

¹Cardiff University, School of Medicine, Cardiff, United Kingdom. ²Swansea Bay University Health Board, Swansea, United Kingdom. ³Royal Devon University Healthcare NHS Foundation Trust, Exeter, United Kingdom. ⁴Hywel Dda University Health Board, Camarthen, United Kingdom. ⁵Cardiff and Vale University Health Board, Cardiff, United Kingdom. ⁶Swansea University, Swansea, United Kingdom

Full Abstract

A dedicated multidisciplinary clinic for the assessment of babies and infants thought to be at risk of Developmental Dysplasia of the Hip (DDH) was established over 10 years ago. It is led by Consultant Paediatric Orthopaedic surgeons, with the support of Paediatric Physiotherapy Extended Scope Practitioners (ESPs), Graf trained Sonographers and Consultant Radiologists.

In 2019 two experienced ESPs became IRMER certified to be able to refer and assess patients' AP pelvis radiographs. An audit of 4 years of practice led to a research study of a standardised reporting template employed by 10 independent reviewers of varying experience and differing healthcare backgrounds.

We present the results of the audit; describe the standardised report template employed based on the International Hip Dysplasia Institute classification; offer a "rule of thumb" guide for the acetabular index; and an independent statistical analysis of the interobserver reliability and accuracy of the 10 reviewers for 44 AP pelvis radiographs with a data set of 880 hips.

Interrater reliability was found to be excellent. It was compatible for the inexperienced (kappa value $k = 0.697$) and the experienced ($k = 0.726$) groups. For the presence of ossification there was almost perfect agreement, ($k = 0.801$, $p < 0.001$).

There was excellent internal consistency for the Acetabular Index measurement

(Cronbach's Alpha, $\alpha = 0.963$) with the Intra Class Coefficient demonstrating excellent reliability of the average measure & moderate reliability of the individual reviewers.

For the final decision on whether a joint was 'normal' or 'abnormal' the agreement was substantial ($k = 0.697$, $p < 0.001$).

The results will be discussed in the light of the increased drive toward the use of Artificial Intelligence in radiological reporting.

Remodelling after percutaneous pinning for Slipped Capital Femoral Epiphysis; The influence of transphyseal screw position.

Joeri Slobbe, Cornelis L.P. van de Ree, Johannes H.J.M. Bessems, [Jaap J. Tol](#)
Erasmus MC - Sophia Children's Hospital, Rotterdam, Netherlands

Full Abstract

Purpose

Slipped capital femoral epiphysis (SCFE) is commonly treated using percutaneous in situ fixation. After screw fixation remodelling of the proximal femur can take place, however factors influencing this process are poorly understood. This study aims to measure the amount of remodelling after in situ SCFE fixation and determine the influence the transphyseal screw position across the physis.

Methods

In this retrospective study, all eligible SCFE patients that had percutaneous screw fixation between 2012 and 2020 were included. The amount of remodelling was determined by measuring the Southwick angle, alpha angle and displacement from Klein's line directly after screw fixation and at final follow up. Transphyseal screw position was measured on AP and frog-leg lateral radiographs. A multiple linear regression model was performed to determine factors influencing the amount of remodelling.

Results

86 patients with 96 affected hips were included, mean age was 12.4($\pm$ 2.02) years at surgery and mean follow up time 3.7($\pm$ 2.03) years. All measurements showed significant remodelling at follow-up compared to baseline. Regression analyses showed that remodelling significantly correlated with deformity at baseline for all measurements. A more anterior screw position was correlated with more improvement in Southwick angle.

Conclusions

A significant but limited amount of remodelling is measured after percutaneous screw fixation for patients with SCFE. The amount of remodelling is influenced by the severity of initial slip and a more anterior screw position. This implicates that optimisation of screw position may be used to guide growth after SCFE and reduce residual deformity at skeletal maturity.

Significance of study

Further insight in screw placement and other factors that influence the process of remodelling in patients with SCFE could potentially lead to better outcomes for patients with SCFE; reducing risk of subsequent femoroacetabular impingement and osteoarthritis.

Enhanced Recovery After Surgery (ERAS) pathways versus Conventional care of children undergoing surgery for Developmental Dysplasia of Hip- A non-inferiority Randomized Controlled Trial

Akash Ghosh^{1,2}, Nirmal Raj Gopinathan¹

¹PGIMER, Chandigarh, India. ²Sheffield Children's Hospital, Sheffield, United Kingdom

Full Abstract

Introduction- Enhanced recovery after surgery (ERAS) pathway consists of a set of interventions meant to improve the peri-operative experience. The aim of the study was to assess whether an ERAS care pathway is effective in reducing post-operative pain and improving parental satisfaction as compared to conventional care pathway for children with developmental dysplasia of hip (DDH) undergoing surgery for open reduction of hip.

Material and Methods- A prospective double-blinded randomized controlled trial was conducted including 44 consecutive patients undergoing unilateral open reduction; with 22 patients in each arm (ERAS and Conventional care). Parents in the ERAS pathway were given detailed pre-operative counselling and taught spica care with a spica doll. The children were also kept fasting for shorter periods, and given non-opioid analgesia with restricted inhalational anaesthesia. They were mobilized early post-operatively on a spica stroller. The primary outcome was postoperative pain, assessed with the help of the FLACC scale. Pre-operative parental anxiety was assessed using the STAI scale and parental satisfaction was assessed at 3 months follow-up using the Swedish parental satisfaction questionnaire.

Results- The mean age was 2.76 ± 1.32 years (34 females, 10 males). There was no significant difference in the baseline characteristics of the groups. Post-operative FLACC scores and episodes of vomiting were significantly lesser for the ERAS group for the immediate postoperative period. The length of hospital stay was significantly shorter for the ERAS group (2.59 ± 0.80 days) ($p < 0.001$). The mean pre-operative STAI-State anxiety score was significantly higher in the conventional pathway (50.86 ± 2.40) than the ERAS group (43.05 ± 2.46) ($p < 0.001$). Parental satisfaction was significantly greater in the ERAS group.

Conclusion- ERAS care is effective in reducing postoperative pain in children with developmental dysplasia of the hip undergoing open reduction. It also reduces parental anxiety and increases parental satisfaction.

Preoperative Ultrasound in Paediatric Supracondylar Fracture-Related Nerve Injuries: Diagnostic Accuracy and Surgical Correlation

Amin Abukar, Nimalesh Yogarajah, Kapil Sugand, Ian Pressney, Anna Panagiotidou, Marco Sinisi, Ashley Simpson, Michael Fox
 Peripherap Nerve Injury Unit, Royal National Orthopaedic Hospital, London, United Kingdom

Full Abstract

Aims: Nerve injuries complicate 10–15% of paediatric supracondylar humerus fractures. Decision to perform surgical exploration are traditionally guided by clinical and electrodiagnostic assessment, which have limitations. This study evaluated the clinical utility of preoperative ultrasound.

Methods: We retrospectively reviewed 22 children (mean-age 7 years, range 5–11) with nerve palsy following supracondylar fracture referred to a tertiary peripheral nerve injury centre. All underwent preoperative elbow ultrasound and surgical exploration with neurolysis ± repair/grafting. Findings were categorised as: (1) structural nerve damage, (2) nerve compression/tethering, (3) neuroma/swelling, or (4) nerve entrapment in fracture. Diagnostic performance (sensitivity, specificity, positive predictive value [PPV], negative predictive value [NPV]) were calculated using intraoperative findings as the reference standard, and computed odds (OR) and risk ratios (RR) for ultrasound detection.

Results: Median nerve involvement was most common (81.8%), followed by ulnar (36.4%) and radial (9.1%) nerves. Ultrasound demonstrated highest sensitivity for detecting nerve compression/tethering (86.7%) and neuroma formation (67.7%), followed by structural damage (64.7%). Specificity was highest for excluding nerve entrapment (94.4%) and neuroma (73.7%). NPV was high for neuroma (93.3%) and entrapment (85.0%). PPV for structural damage (78.6%) and nerve compression (72.2%) were high. No significant differences in OR or RR were observed given the small sample. Where ultrasound showed structural damage or compression, surgical exploration confirmed pathology in the majority, prompting timely neurolysis/grafting. Normal ultrasound reliably excluded neuroma in 93% and entrapment in 85% of cases.

Conclusion: Preoperative ultrasound is a safe, inexpensive, and accurate adjunct for evaluating nerve injuries after supracondylar fractures. Ultrasound accurately detects nerve compression/tethering and excludes entrapment/neuroma. In persistent palsy ultrasound at 6-weeks post-injury helps identify children who may benefit from early surgical exploration, therefore supporting its use to guide clinical decision-making.

GOVERNANCE FOR SURGERY FOR DEVELOPMENTAL DYSPLASIA OF THE HIP- LEARNING FROM THE FIRST REGIONAL PEER-REVIEW AUDIT IN THE UK

Anish Sanghrajka¹, Elizabeth Ashby², Pranai Buddhdev³, Mariusz Chomicki², East of England DDH Collaborators⁴

¹Great Ormond Street Hospital for Children, London, United Kingdom. ²Cambridge University Hospitals, Cambridge, United Kingdom. ³Broomfield Hospital, Mid & South Essex Hospitals, Chelmsford, United Kingdom. ⁴East of England ODN, Cambridge, United Kingdom

Full Abstract

Background

Surgical management of Developmental Dysplasia of the Hip (DDH) is an example of low-volume high-complexity (LVHC) surgery. Peer-review of outcomes is important for these cases, but many units have low numbers of surgeons performing these procedures limiting the scope of these discussions.

Aim

To report the utility of a regional peer-review audit (PRA) of the surgical management of DDH

Methods

Units from East of England were invited to participate in a peer-review audit of all surgical DDH cases performed within their unit in 2024. A standardised datasheet was sent to each participating unit. Data collected included demographics, International Hip Dysplasia Institute (IHDI) grade, type of reduction (open/closed), single/dual consultant case, concomitant osteotomies, post-operative imaging and complications. At a face-to-face meeting, a summary of the region's data was presented, and every unit presented each of their cases.

Results

4 units of 10 participated. 42 hips in 34 children were included (14 closed, 28 open reductions). All IHDI 2 cases had closed reductions, with significant variation in management of IHDI 3/4 hips within and between units. The majority of units performed dual-consultant operating for open reductions, with variation for closed reductions. Only 2 of 4 units performed axial imaging post-operatively for all cases. 11 surgeons from a total of 6 units attended the meeting. It was agreed that all open reductions should be performed by dual-consultants and that post-operative axial imaging should be performed in all cases. All surgeons involved in this audit found it worthwhile and will continue the process annually.

Conclusions

This study demonstrates significant variation in the practices around surgical management of DDH between units in our region. Based on our experience, we recommend regional peer-review audit to improve governance processes for DDH surgery, and for other LVHC procedures.

Outcomes at Skeletal Maturity of a Technique of Closed Reduction and Short Leg Spica Cast in 85 Hips.

Bhushan Sagade¹, Peter Calder¹, Aresh Hashemi-Nejad¹, Deborah Eastwood^{1,2}, Sally Tennant¹

¹Royal National Orthopaedic Hospital, London, United Kingdom. ²Great Ormond Street Hospital, London, United Kingdom

Full Abstract

Introduction:

A previous study described the medium-term outcome of Closed Reduction (CR), incorporating an open soft-tissue release when indicated, and an above knee short-leg plaster of Paris cast in 120 patients under age two years with Developmental Dysplasia of the Hip (DDH). This study assessed the long term clinical and radiological results of this cohort to Skeletal Maturity (SM).

Methods:

Patients were assessed clinically and radiologically, 10-23 years following initial surgery. Clinical outcomes included the Modified Mc-Kay criteria and Leg length discrepancy (LLD). Radiological outcomes included Centre Edge Angle (CEA), avascular necrosis (AVN) and Severin Classification at skeletal maturity.

Results:

Of the original cohort of 113 hips in 106 children, 85 hips in 79 patients were followed up to SM. Secondary surgery rate for residual acetabular dysplasia was 13%.

CEA at skeletal maturity was $> 25^\circ$ in 68% whereas it was $< 20^\circ$ in 13% hips. Patients with Unilateral DDH, the mean $\pm$ SD CEA of the affected hip ($26.7 \pm 8.6^\circ$) was lower than the unaffected hip ($34.4 \pm 4.9^\circ$). Tonnis Roof angle was $< 10^\circ$ in 72% hips.

According to the Kalamchi-McEwan classification, 77% hips had no osteonecrosis and 15% hips had grade 2-4 osteonecrosis

At SM, 92% hips had Severin 1 or 2 results. Severin grade improved in 4 hips and worsened in 12 hips between the two study points.

Mc-Kay criteria was excellent-to-good in 87% hips. It was significantly better in group without further surgeries ($p=0.02$), there were no significant differences in Severin grades between group with or without further surgeries ($p=0.52$).

Conclusion:

Closed reduction, with concomitant adductor and psoas release when required and the use of a short leg plaster of Paris cast for three months, produces good results at skeletal maturity in children less than two years with DDH, with a further surgery rate of <15%.

Active surveillance versus abduction bracing for Graf IIb DDH: residual dysplasia at 2 year follow-up

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Full Abstract

Introduction

The optimal management of stable dysplastic hips remains debated internationally. Abduction bracing has traditionally been standard of care, yet growing evidence suggests that active surveillance may yield comparable outcomes. This study compared residual acetabular dysplasia (RAD) at 2 years of age in infants with Graf IIb dysplastic hips managed with a Pavlik harness versus active surveillance.

Methods

In a longitudinal cohort study infants aged 3-4.5 months with Graf IIb hip dysplasia were included. Treatment allocation followed a national guideline change in 2021, transitioning from Pavlik harness treatment to active surveillance, resulting in two naturally formed consecutive cohorts. Propensity score weighting was used to balance baseline characteristics between the two cohorts and to reduce confounding. RAD at 2 years of age was assessed using acetabular index-lateral edge (AI-L) and acetabular index-sourcil (AI-S). Hips were classified as normal or dysplastic using Tönnis values (AI-L) and Novais values (AI-S).

Results

The study included 148 infants (191 hips) treated with a Pavlik harness and 441 infants (590 hips) managed with active surveillance. At 2-year follow-up, mean AI-L was 23.0° [21.0-

25.0°] and mean AI-S was 21.4° [20.0-23.0°] in the Pavlik harness group, compared to respectively 21.0° [19.0°-24.0°] and 19.7° [17.1°-20.9°] in the active surveillance group. RAD was observed in 11.5% (AI-L) and 13.6% (AI-S) of Pavlik-treated hips and in 6.3% (AI-L) and 5.3% (AI-S) in the active surveillance group. All differences fell within the predefined non-inferiority margin of 10%.

Conclusions

Active surveillance is non-inferior to Pavlik harness treatment for infants with Graf IIb DDH. At 2 years, outcomes demonstrate that active surveillance is a safe and effective management strategy, supporting its use in this population.

Static standing frames facilitate greater weight-bearing than dynamic frames in non-ambulant children with neurodisability

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Full Abstract

Introduction: Neurodisability represents the leading source of disability in the UK, impacting 3-4% of children. Muscle weakness, reduced coordination and abnormal forces result in decreased ambulation, leading to low bone mineral density and fragility fractures, with over 70% occurring in the lower limbs. Standing frames are a mainstay of therapy regimens used for non-ambulant children with the aim of loading their lower limbs in part to promote bone strength. This project aimed to evaluate the efficacy of four different standing frames in facilitating effective weight-bearing.

Methods: 48 participants were recruited: 24 typically developing children (aged 8.2 ± 3.3 years; 11 male and 13 females; normal muscle tone) and 24 children with neurodisability (aged 9 ± 3.2 years; 13 males and 11 females; 12 hypertonic and 12 hypotonic; GMFCS III-V equivalent). Vertical ground reaction forces were collected using instrumented insoles (Pedar, Novel.de). Participants were positioned for five minutes in three static (prone, upright, supine; Leckey; etac; Jenx) and one dynamic (Innowalk Pro, Made for Movement) frame based on their tolerance. Statistical testing using Shapiro-Wilks and Kruskal-Wallis tests.

Results: Weight-bearing in the standing frames was 3 times lower for children with neurodisability, with <5% of bodyweight measured for some participants. Across all participants, the dynamic standing frame resulted in the lowest weight-bearing ($p < 0.001$). When considering hypertonic, hypotonic and normal muscle tone groups, this remained true for the normal muscle tone group, however, differences remained only between the dynamic and upright frames in the hypotonic group ($p = 0.0084$) and between the dynamic and prone frames in the hypertonic group ($p = 0.026$). The static frames provided greater weight-bearing than the dynamic frame.

Conclusions: Weight-bearing outcomes vary between standing frames, with the dynamic frame facilitating less weight-bearing than static. Muscle tone influences frame choice and orientation. Incorporating weight-bearing measurement systems into standing frames could enhance frame effectiveness.

A Retrospective Cohort Study In Outcomes Of Paediatric Forearm Fractures When Manipulated Under General Anaesthetic or Ketamine vs Intra-nasal Fentanyl.

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Full Abstract

Background

Paediatric forearm fractures are common injuries and frequently require manipulation under anaesthesia (MUA). Traditional management with general anaesthesia (GA) or ketamine carries risks, demands significant resources, and often necessitates admission. Getting It Right First Time (GIRFT) advocates safer, resource-efficient pathways. Intranasal fentanyl (INF) offers rapid analgesia without theatre use. This study evaluates the effectiveness of INF compared with GA or ketamine for paediatric forearm fracture manipulation.

Method

A retrospective two-armed cohort study included patients ≤ 15 years of age with radius and/or ulna shaft fractures requiring manipulation from 2019–2022 at a single institution. Patients managed with surgical fixation were excluded. Two cohorts were analysed: Cohort 1 (n=39), treated with GA or ketamine (2019–2020), and Cohort 2 (n=42), age- and sex-matched, treated with INF in 2022. Outcomes included casting duration, angulation post-manipulation and at cast removal, re-fractures, failed reduction and malunion. Statistical analysis compared the two cohorts.

Results

In Cohort 1 (GA/Ketamine), mean post-manipulation angulation was 7.87° (95% CI ± 1.75), increasing to 12.4° (95% CI ± 2.42) at cast removal. Re-fractures occurred in 15.4% (6 patients), with significant complications in 10.3% (4 patients).

In Cohort 2 (INF), mean angulation post-manipulation was 10.0° (95% CI ± 1.57) and 9.95° (95% CI ± 1.67) at cast removal. Re-fractures occurred in 16.7% (7 patients), with significant complications in 4.8% (2 patients).

No statistical significant difference was found in re-fracture rate ($p=0.975$) or other complications ($p=0.345$) between the two cohorts.

Conclusion

Three years have passed since the GIRFT report advocated for INF to be used for paediatric forearm fracture manipulation but there remains resistance to its use.

This study demonstrates that INF is a safe and effective alternative to GA or ketamine for paediatric forearm fracture manipulation and supports GIRFT guidance.

Radiological outcomes in the Children's Radius Acute Fracture Fixation Trial (CRAFFT)

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Full Abstract

Title

Radiological outcomes in the Children's Radius Acute Fracture Fixation Trial (CRAFFT)

Purpose

To describe radiographic deformity and remodelling in the CRAFFT trial and evaluate whether coronal and sagittal angulation influences functional and cosmetic outcomes.

Method

This radiological analysis forms part of the Children's Radius Acute Fracture Fixation Trial (CRAFFT), a multi-centre randomised non-inferiority trial comparing surgical reduction with non-surgical casting for displaced distal radius fractures in children aged 4–10 years. Digital AP and lateral wrist radiographs obtained as part of routine care were retrieved from local PACS systems at baseline and one-year post-treatment. Coronal and sagittal angulation was measured using long-axis alignment and physal-referenced methods. Percentage apposition, coronal inclination and the presence of an ulnar styloid injury were also recorded. Measurements were undertaken by two independent assessors with discrepancies adjudicated by a third reviewer. Radiographic deformity at baseline and follow-up was compared between treatment groups, and remodelling assessed up to 12 months. Functional outcomes were examined using PROMIS Upper Extremity scores at 3, 6 and 12 months, and cosmetic outcomes using VAS cosmesis at 3 and 12 months.

Results

Radiograph retrieval, measurement and linkage with clinical outcomes are underway. Full results describing baseline deformity, subsequent remodelling and the relationship between angulation, function and cosmesis will be presented.

Conclusion

This study will quantify radiographic deformity and remodelling following treatment of displaced distal radius fractures in children and determine whether residual coronal or sagittal angulation affects functional recovery or cosmetic appearance.



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PODIUM FREE PAPERS ABSTRACTS

Long-Term Outcomes Following Treatment for Congenital Talipes Equinovarus (CTEV): A Service Evaluation Using Patient-Reported Outcome Measures

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Abstract

Background

Congenital talipes equinovarus (CTEV), or clubfoot, is a common paediatric orthopaedic condition. The Ponseti method has become the gold standard for treatment, with high correction rates and reduced need for surgery. However, the long-term functional and psychosocial outcomes are less well understood. Patient-reported outcome measures (PROMs) offer an opportunity to evaluate function and quality of life beyond clinical observations. This service evaluation aimed to explore long-term outcomes using validated PROMs.

Methods

Questionnaires were distributed to families of children treated for CTEV at a tertiary centre and a district general hospital. These included elements of the recently published CTEV Core Outcome Set: PROMs and the Oxford Ankle Foot Questionnaire for Children (OxAFQ-C). Demographic and treatment-related data were also collected. Analysis used descriptive statistics.

Results

Thirty-eight children, at least five years after starting Ponseti treatment, participated. While many children were doing well, a notable minority still experienced foot-related challenges. Around one-third reported difficulties with walking, running, or standing. Pain or tiredness affected some children, with over half reporting aching legs after activity. Only two-thirds of children were able to manage a long walk, reflecting ongoing endurance limitations. Most could join in with school and play, with around a quarter reporting concerns about appearance or gait.

Conclusion

Ponseti treatment resulted in positive long-term outcomes for most children. Although some still reported pain and fatigue they continue to engage in school and play.

Psychosocial impacts of an altered foot appearance or gait remain unexplored. Future research could focus on this, using qualitative methods.

Shaping growth efficiently: Implementation of a day-case protocol for hemiepiphysiodesis in a large UK teaching hospital

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Abstract

Background: Hemiepiphysiodesis is an established surgical technique to gradually correct paediatric lower limb angular deformities. Currently no national guidelines exist regarding standardisation of care. Before 2023, our large teaching centre operated without a day-case protocol for this common surgical practice; initial results demonstrated 63% inpatient stay post-operatively. This project evaluates the effectiveness of a day-case protocol introduced to streamline care and reduce inpatient stay.

Aims: To assess adherence to the newly implemented day-case protocol and determine its impact on patient pathway and outcomes compared with the previous inpatient model.

Methods: 32 patients were identified who underwent isolated hemiepiphysiodesis between 01/01/2024-01/11/2025. Collected data included length of admission, provision of crutches and discharged analgesia, theatre time, readmissions, documented procedure name, and theatre list position. Outcomes were compared with pre-protocol data.

Results: Following protocol implementation, 90.6% of procedures were day cases, representing a 53.6% increase from the previous audit. 3% of patients required crutches and 12.5% received discharge analgesia. Theatre duration remained consistent (modal time 1–2 hours), and no readmissions for post-operative complications were identified. Documented procedure name was “hemiepiphysiodesis” in 36.4% of cases, and 40.6% were listed first on theatre schedules.

Conclusion: Introducing a structured day-case protocol significantly increased day-case rates for hemiepiphysiodesis despite theatre times remaining consistent, without compromising patient safety or recovery. Low analgesia requirements and absence of readmissions from post-operative complications support day-case delivery as a safe and effective model. Ongoing improvements should focus on standardising the documented procedure name and prioritising theatre scheduling to optimise this pathway.

The Psychosocial Impact of Patellofemoral Dislocation and Anterior Cruciate Ligament (ACL) Injury in Children and Adolescents: A Systematic Review and Thematic Analysis

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Abstract

Aims

To systematically review themes synthesised around psychosocial outcomes of anterior cruciate ligament (ACL) ruptures and patellofemoral dislocation in children and adolescents, integrating qualitative and quantitative evidence.

Methods

MEDLINE, EMBASE, APA Psycinfo, ClinicalTrials.gov, and WHO International Clinical Trials Registry Platform were searched separately from January 1st, 1990, to February 4th, 2025. Qualitative data were analysed using inductive thematic analysis in MAXQDA 24 data software analysis; quantitative studies were summarised descriptively. The protocol was registered prospectively (PROSPERO [CRD42025644464](https://doi.org/10.1111/CRD4.2025644464)).

Results

28 studies on ACL injuries and 8 studies on patellofemoral dislocation were included in the study. Across both injury types, children reported reduced quality of life (QoL) when compared to the healthy population, even after full physical recovery. ACL injuries were strongly associated with kinesiophobia, reduced return to sports (RTS), and a disruption in athletic identity and career. Patellofemoral dislocation patients demonstrated similar reductions in QOL but exhibited chronic psychological burden associated with recurrent instability rather than fear of reinjury. Qualitative themes include altered self-identity, fear-

avoidant behaviour, and social withdrawal with unmet needs during rehabilitation. Psychological readiness was the major determinant of RTS rather than physical function.

Conclusion

ACL ruptures and patellofemoral dislocation in children and adolescents have a substantial impact on the psychological well-being beyond functional recovery. Patellofemoral dislocation remains largely under-researched, particularly in the qualitative domains, in comparison to ACL. Fear of re-injury, loss of identity, and reduced confidence limit recovery and RTS or activities.

South West Audit of Paediatric ACLs (SWAP-ACL)

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Abstract

Background

Paediatric ACL ruptures are prevalent injuries, posing a significant surgical burden. SWAP-ACL defines regional practice in the South-West, compares to BOAST guidelines, and identifies areas for improvement and collaboration.

Methods

This retrospective collaborative audit collected data via an online questionnaire regarding the diagnosis and treatment of ACL injuries in under 16-year-olds.

Results

12 sites responded - 92% of them assess paediatric patients with ACL rupture and 84% treat surgically, although only 55% have an acute knee pathway. All units assess remaining growth - 40% use hand & wrist bone age radiographs and 60% use long leg alignment views. Surgical procedures are carried out by adult surgeons in 90% of trusts, 60% have a surgeon confident in performing physeal sparing procedures, and 40% always perform lateral tenodesis. Heterogeneity was observed in follow-ups for growth disturbances, with 30% of units saying they rarely do. 59 paediatric ACL reconstructions were conducted in the South West between 01/09/2024 and 31/08/2025. 56% of these patients were skeletally immature at the time, with 91% of them undergoing transphyseal ACL reconstructions. Despite 80% of sites having a local MDT, 83% would still prefer if they had a region-wide MDT, and 75% would like the option of referring to a regional centre.

Conclusion

Regional practice is varied, with most sites adhering to BOAST guidelines to varying degrees. Surgical activity is distributed across centres, with fewer centres confident in performing complex procedures on younger patients. Our goal is to set up a region-wide network for discussion and referral of appropriate patients.

A qualitative study to determine the acceptability of a family education tool in the referral pathway of normal variants in children's orthopaedic surgery: using Sever's disease as an exemplar 'normal variant'

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Abstract

Background: Normal variants such as Sever's disease account for a substantial proportion of paediatric orthopaedic referrals, despite being self-limiting. Limited understanding drives parental anxiety and demand for specialist review, contributing to pressure on outpatient services. Digital education tools may improve health literacy and support more efficient referral pathways, but acceptability must be established.

Aim: To explore whether an educational video for Sever's disease can improve family understanding and support decision-making to reduce avoidable paediatric orthopaedic referrals.

Methods: This ongoing qualitative study (The Children's Orthopaedic Online Learning [COOL] Study) uses semi-structured interviews with child-parent dyads (children aged 8–15 years) following exposure to a co-designed educational animation. Reflexive thematic analysis is being undertaken. Six interviews have been completed, with at least six more interviews scheduled.

Results: Early findings indicate high acceptability and perceived service value. Families reported improved understanding of Sever's disease, particularly the growth-related pathology underpinning symptoms, which provided reassurance and reduced uncertainty. Some parents stated that, had the video been available earlier in the referral process, they may not have sought orthopaedic review. Participants highlighted the clarity, simplicity, and efficiency of the video, describing high informational gain. Some families felt the video would not be sufficient as a sole intervention, particularly where diagnosis had been unclear, but still valued its educational benefit.

Conclusions: Preliminary findings suggest targeted digital education may reduce unnecessary paediatric orthopaedic referrals by improving family understanding for

normal variants, while preserving access to specialist care for children with complex presentations.

OUTCOMES OF INTERNAL FIXATION FOR OSTEOCHONDRITIS DISSECANS OF THE SKELETALLY IMMATURE KNEE: SYSTEMATIC REVIEW AND META-ANALYSIS

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Abstract

Introduction:

Osteochondritis dissecans commonly affects skeletally immature adolescents and is usually treated conservatively. Internal fixation is reserved for unstable or refractory lesions. This review assesses clinical, radiological and patient-reported outcomes of internal fixation in juvenile OCD, focusing on recurrence and reoperation rates.

Methods:

A systematic search across four databases: MEDLINE, EMBASE, PUBMED, and Web of Science, identified primary studies reporting outcomes of internal fixation for OCD in patients with open physes at the time of surgery. Risk of bias was assessed using RoB 2.0 and ROBINS-I tools. The review followed PRISMA guidelines and was registered on PROSPERO (CRD42024529128).

Results:

From 4,840 identified articles, 22 studies met inclusion criteria, evaluating 573 knees with open physes and a minimum follow-up of 6 months. The pooled recurrence rate was 19.1% (95% CI: 0.09–0.36), reoperation rate was 9.6% (95% CI: 0.05–0.16), and adverse event rate was 0.82% (95% CI: 0.0012–0.055). At 24 months postoperatively, significant improvements were observed in the Knee injury and Osteoarthritis Outcome Score (KOOS) (SMD: 6.18; 95% CI: 1.66–10.69; $p=0.028$) and Lysholm score (SMD: 4.04; 95% CI: 2.84–5.23; $p=0.0002$). No significant difference was found in IKDC scores at 24 months (SMD: 5.27; 95% CI: –0.21–10.75; $p=0.055$), though paediatric IKDC scores improved significantly at 12 months (SMD: 6.10; 95% CI: 3.04–9.16; $p=0.025$).

Conclusion:

Internal fixation for juvenile OCD results in significant postoperative improvements in clinical outcomes. However, notable recurrence and reoperation rates highlight the need for careful, individualised patient selection when considering this treatment option.

Cast Forward: Speeding Up Clubfoot Correction with Accelerated Ponseti Casting in Mid & South Essex

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Abstract

Introduction. The Ponseti method is the accepted standard for correction of idiopathic clubfoot. Several centres have explored *accelerated* Ponseti protocols (shorter intervals between cast changes) to reduce total treatment time, whilst maintaining outcomes equivalent to standard once-weekly casting. Published studies report no increase in complication or relapse rates. We aimed to evaluate outcomes following its introduction at our hospital.

Methods. We performed a prospective service evaluation of our nurse-led twice-weekly accelerated Ponseti clinic at Broomfield Hospital. Consecutive infants treated between May 2020 – November 2025 were included. Initial severity was recorded using the Pirani score. Outcomes included number of casts to correction, frequency of percutaneous Achilles tenotomy, early relapse and complications.

Results. 52 feet (41 patients) underwent accelerated casting. Median initial Pirani score was 5 (range 1-6) with an average of 4.3 casts (range 2-6) required to achieve correction. 33 feet required percutaneous Achilles tenotomy. Early relapse within the follow-up period (mean 3 years) occurred in 5 patients due to non-adherence of boots & bars treatment. All improved with re-casting, with two requiring repeat tenotomy at specialist centres.

Conclusion. Our accelerated Ponseti clinic achieved rapid correction of idiopathic clubfoot with a low complication and early relapse profile. Compared with standard once-weekly casting, this approach reduced overall casting duration and clinic visits, likely reducing travel burden, stress and trauma for families. These findings support adoption of an accelerated, nurse-led delivery model where staffing, training and brace adherence can be assured. Larger prospective studies with longer follow-up are warranted to confirm durability of correction.

Outcomes after surgical correction of miserable malalignment syndrome: a single-centre service evaluation

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Abstract

Background: Miserable malalignment syndrome (MMS) combines excessive femoral anteversion and external tibial torsion that can result in intractable anterior knee pain. Evidence on outcomes after corrective strategies remains limited.

Methods: Mixed retrospective–prospective service evaluation of children and adolescents undergoing MMS correction at Southampton Children's Hospital (2018–2025). Primary outcome was change in Kujala Anterior Knee Pain Score (AKPS, 0–100) from baseline to ≥12 months. Comparisons were (1) femoral fixation in double-level osteotomy (proximal plate vs diaphyseal intramedullary (IM) nail) and (2) within plated cases, femur-only vs femoral and tibial correction. Secondary outcomes were time to full weight-bearing, complications (Modified Clavien–Dindo–Sink), and implant removal.

Results: 31 patients underwent 52 procedures (12 femur-only; 40 double-level (26 plate, 14 IM nail)). Paired baseline and ≥12-month AKPS was available for 9 plate and 7 IM nail cases: mean improvement 17.7 vs 16.3 points; between-group difference –8.6 (95%CI –38.6 to 21.4; $p=0.54$). Femur-only cases ($n=3$ paired) improved 22.0 points versus 17.7 in double-level plated cases ($n=9$ paired) (difference 4.1, 95%CI –33.9 to 42.0; $p=0.81$). IM nails enabled earlier full weight-bearing (median 0 vs 6 weeks; $p=0.014$). Complications occurred in 12/52 (23.1%), mostly minor (11/12); one non-union required revision. Implant removal occurred in 10/26 (38.5%) plates and 0/14 IM nails.

Conclusions: Derotational osteotomy for MMS was associated with clinically meaningful AKPS improvement. PROM changes were similar across all strategies in this cohort, but IM nailing supported earlier mobilisation and avoided implant removal. Larger prospective multicentre studies with complete PROM capture are needed.

Title: The Role of Perfusion MRI in Detecting Avascular Necrosis of the Femoral Head in Children: A Systematic Review

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Abstract

Abstract

Background

Avascular necrosis (AVN) is associated with poor outcome in paediatric hip disorders including developmental dysplasia of the hip (DDH), slipped capital femoral epiphysis (SCFE), and Legg–Calve–Perthes disease (LCPD). Perfusion MRI (pMRI) and contrast-enhanced MRI (CE-MRI) may predict femoral head hypoperfusion, particularly before the onset of structural change, and therefore improve therapeutic options and outcome.

Methods

MEDLINE, Embase, Web of Science, and Cochrane databases were searched from inception to October 2025. Studies assessing pMRI or CE-MRI as a diagnostic or prognostic tool for AVN of the femoral head in patients under 18 years were included. Diagnostic accuracy for AVN screening and prognostic associations with femoral head deformity were included as outcomes. Risk of bias was assessed using QUADAS-2 and QUIPS tools.

Results

Thirteen studies comprising 538 patients (567 hips) met the inclusion criteria. Nine evaluated pMRI or CE-MRI as screening tools for AVN in DDH and SCFE, and four assessed prognostic value in LCPD. Analysis using weighted averages demonstrated high sensitivity (90.44%) and negative predictive value (NPV) (90.44%) for pMRI, outperforming CE-MRI. Prognostic studies consistently showed associations between femoral head hypoperfusion and adverse radiographic outcomes, including higher lateral pillar class, increased deformity index, and worse sphericity deviation scores.

Conclusion

Perfusion MRI is a potentially sensitive screening tool for early detection of AVN in paediatric hip disorders and as a prognostic indicator in LCPD. However, heterogeneity and limited study numbers mandate cautious interpretation. High-quality prospective studies are necessary to standardise imaging protocols and validate clinical utility.

Universal Provision of Limbo Waterproof Protectors: A Charitable Pilot in NHS Grampian

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Abstract

Children with casts often face challenges with washing. Waterproof protectors may be purchased privately but in most cases they need to be ordered, resulting in a delay. The average cost is £20–£25, which can be prohibitive for some families. In 2024, we piloted the universal provision of charity funded Limbo sleeves.

All children requiring a cast were provided with a Limbo protector at the point of care. Each sleeve included a QR code linking to a video explaining that provision was funded by charitable donations and offered a “Pay It Forward” option. Usage data, costs, and parent feedback were collected prospectively.

A total of 614 Limbo sleeves were issued in 2024 at a cost of £10,923.31. Families paid forward £1134, representing approximately 10.4% of the cost. Feedback from families was universally positive, with parents reporting reduced stress and the freedom to maintain normal activities. The initiative eliminated delays and financial barriers. The model has since been adopted by other centres.

Universal, point-of-care provision of waterproof protectors is feasible, affordable when supported by charitable funding, and highly valued by families. The projected budget for the second year is £8,285, reflecting residual stock and represents a more typical annual cost. To further enhance sustainability, signage and communication are being revised to make the “Pay It Forward” option more visible. The initiative is clear example for charity donors of the impact of their support. This pilot demonstrates a practical, impactful intervention that improves patient experience and could be replicated in other paediatric centres.

Genomic Susceptibility to Anterior Cruciate Ligament Injury: A Systematic Review

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Abstract

Background: Anterior cruciate ligament (ACL) injury causes substantial morbidity, predisposing to early osteoarthritis. While anatomical risk factors such as posterior tibial slope, intercondylar notch morphology, and joint laxity are well established, genomics underlying injury susceptibility remain inconsistently characterised.

Methods: A systematic review was conducted following PRISMA guidelines, searching MEDLINE, Embase, Cochrane, Scopus, WoS, ClinicalTrials.gov, WHO-ICTRP from inception to December 2025. Eligible studies examined associations between genetics and ACL injury susceptibility. Data was extracted on population characteristics, tissue source, variants, and associations.

Results: Sixty studies were included, analysing DNA from blood or saliva, with fewer examining ACL tendon or synovium. Consistent associations emerged for genes regulating collagen integrity (COL5A1, COL12A1, COL3A1, DCN) and matrix remodelling (MMP3), linked to altered fibril diameter, reduced tensile strength, and laxity. Genomic susceptibility interacts with morphological risk factors (smaller intercondylar notch width, increased posterior tibial slope, and reduced ACL size), lowering mechanical thresholds for failure. Associations for other candidates (GDF5, COL1A1) were inconsistent and sex- or ethnicity-dependent, while inflammatory genes (TNF, IL1B) showed limited associations.

Conclusions: ACL injury susceptibility is consistently associated with pathways governing connective tissue structure and matrix remodelling rather than inflammation. These genomic factors appear to modulate intrinsic ligament quality and amplify the biomechanical impact of adverse knee morphology. Clinically, this supports a role for integrated genomic-morphological risk stratification to identify high-risk individuals, particularly in paediatric populations, enabling targeted training, load modification, or early soft-tissue interventions. Prospective studies combining genomics with imaging-based morphology are required before implementation in screening or preventive care.

Efficacy of Preoperative Multidisciplinary Team (MDT) Planning in Complex Paediatric Orthopaedic Cases: Optimising PICU Bed Allocation and Minimising Unplanned Admissions.

Varun Ambagade, Isha Hazarey, Luzie Maier-Hasselmann, Lucy Kallmeier, Catherine Flanagan (CNS), Shola Yissau (CNS), Joanne Perkins (anaesthetic consultant), Daniel Reed (Consultant orthopaedic surgeon, Katy Nicholson (Anaesthetic consultant) Evelina London Children's Hospital, London, United Kingdom

Abstract

Aims To assess the effectiveness of preoperative MDT planning in allocating postoperative PICU beds for children with significant comorbidities undergoing elective orthopaedic surgery, focusing on allocation accuracy and prevention of unplanned PICU escalations.

Methods Retrospective review of 64 consecutive paediatric patients who proceeded to elective orthopaedic surgery after MDT discussion at a tertiary centre (2023–2025). Data collected included MDT-requested postoperative bed, actual bed utilised, unplanned PICU escalations, postoperative complications, baseline respiratory support, ASA grade and comorbidity burden. Bed utilisation proportions were calculated with 95% confidence intervals. Complication rates were compared between planned-PICU and non-PICU groups.

Results Thirteen patients (20.3%) were allocated PICU beds by the MDT; 11 actually required PICU (17.2%), giving an allocation accuracy of 84.6% with over-planning in only 2 cases (3.1%). No child required unplanned escalation to PICU (0%). Postoperative complications were significantly higher in the planned-PICU group (69.2% vs 33.3%)

Conclusion Preoperative MDT planning in this high-risk cohort was highly effective, achieving precise PICU bed utilisation and eliminating unplanned admissions. Modest conservative over-allocation appears to contribute to patient safety without substantial resource wastage. These results strongly support the continued use of structured MDT risk assessment for complex paediatric orthopaedic surgery.

Paediatric Meniscal Injuries: Re-evaluation of Surgical Management Against GIRFT Guidelines in a Tertiary Paediatric Centre.

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Abstract

Background

Meniscal preservation is recommended in paediatric meniscal injuries to reduce risk of early degenerative joint disease. Previous Get It Right First Time (GIRFT) reviews and our first audit cycle demonstrated low rates of meniscal repair, largely due to delays in referral and diagnosis rather than surgical expertise.

Aim

To re-audit the operative management of paediatric meniscal injuries at Bristol Children's Hospital (BCH), comparing rates of meniscal repair vs meniscectomy, complications, and re-operation rates.

Methods

A retrospective audit was conducted of patients ≤ 16 years undergoing primary operative management of a first presentation meniscal injury at BCH between January 2023 and November 2025. Cases were identified through clinic coding and electronic records. Revision surgery, discoid menisci, and non-meniscal procedures were excluded.

Results

29 patients met inclusion criteria (mean age 14.3 years; 65.5% male). Meniscal repair was performed in 24 patients (82.8%), with a repair-to-meniscectomy ratio of 24:5 – an improvement from the initial audit. Meniscectomy was undertaken only where repair was not feasible, including irreparable menisci and late presentations. No complications occurred in 83.3% of repair cases. Three patients required revision repair due to re-tear,

and four patients in total experienced complications requiring repeat surgery including the removal of symptomatic suture material, and an endobutton.

Conclusion

Our second audit demonstrates a marked improvement in meniscal repair rate, in line with GIRFT recommendations. Continued emphasis on early referral, clear documentation of intra-operative decision making, and the development of an acute knee pathway may continue to improve outcomes in the future.