

Programme
11th November
2025



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and Arthroscopy Association**

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Injuries in Football - Back in Action

ANNUAL MEETING



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Medical Students*	£ 55	£ 60	£ 65

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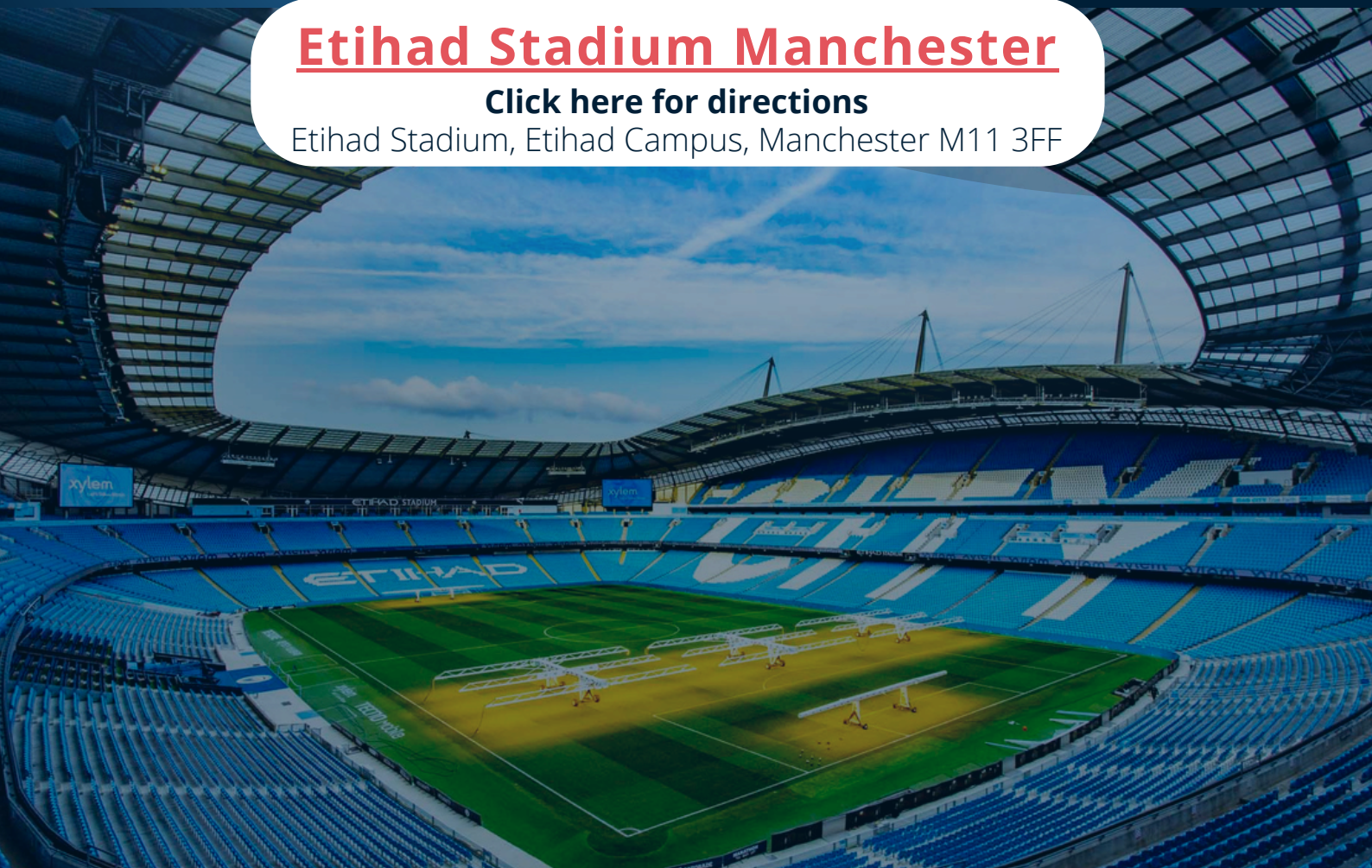


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Adverse events should be reported. Reporting forms and information can be found at <https://yellowcard.mhra.gov.uk/>.
Adverse events should also be reported to IBSA Pharma Ltd on 01923233466 or medicalinformation.uk@ibsa.com.

References:

1. Marcello Sallit *, Giovanni Grasso2 , Salvatore Sallit, Calogero Foti3 . Comparison of two hyaluronic acid preparations for the treatment of rizoarthrosis. 2021. Gazzetta Medica Italiana - Archivio per le Scienze Mediche December;180(12):860-6

2. Tenti, S., Pascarelli, N.A., Giannotti, S. et al. Can hybrid hyaluronic acid represent a valid approach to treat rizoarthrosis? A retrospective comparative study. BMC Musculoskelet Disord 18, 444 (2017). <https://doi.org/10.1186/s12891-017-1809-5>

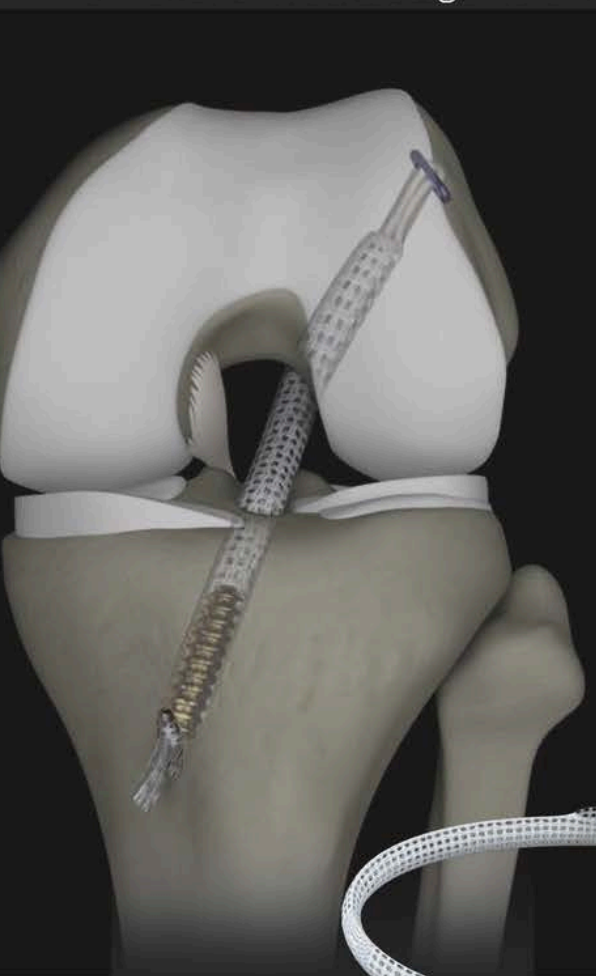
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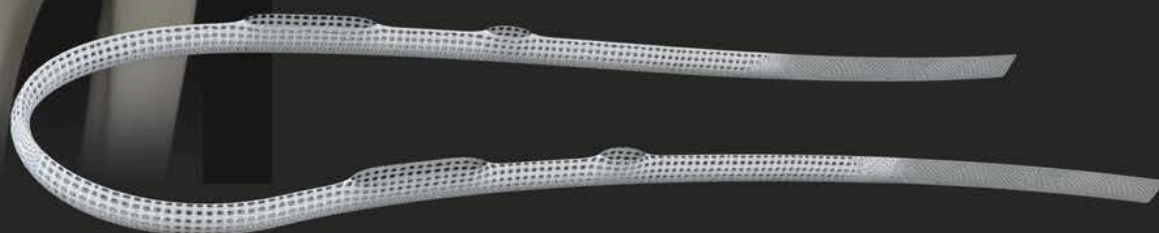
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Dr Klaudiusz Kosowski

POZNAŃ, POLAND

Tuesday 11th, 13:50-14:10

Citizens Suite



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Room: Citizens Suite**08:15 REGISTRATION****08:55 WELCOME****Rhidian Thomas**
BOSTAA President**SESSION 1:
BASEM SESSION**

Return to sports after hamstring injuries

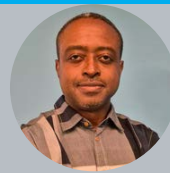
Chairs:**Prof. Dane Vishnubala**
Sport and Exercise Medicine
Doctor - BASEM**Ricci Plastow**
Consultant Orthopaedic
Surgeon - London**Jimmy McDaniel**
S&C coach, Hull
Kingston Rovers**Huw Roberts**
Lead Physiotherapist,
PGMOL**Colin Holton**
Consultant
Orthopaedic Surgeon
Leeds**09:00 Hamstring injuries - a challenging problem****Jimmy McDaniel****09:15 Conservative management and return to play****Huw Roberts****09:30 When to operate?****Colin Holton****09:45 Discussion**

Room: Citizens Suite**SESSION 2:
SPORTS INJURIES UPDATE I**

What's new in...

Chairs:**Fazal Ali**Consultant Orthopaedic
Surgeon - Chesterfield**Sanjeev Anand**Consultant Orthopaedic
Surgeon - Leeds**Sue Deakin**Consultant
Orthopaedic Surgeon
West Suffolk**Neil Jain**Consultant Orthopaedic
Surgeon - Wilmslow10:00 **Knee injuries**10:15 **Foot and ankle injuries**10:30 **Discussion****Neil Jain****Sue Deakin**10:35 **COFFEE | INDUSTRY EXHIBITION | POSTERS****SESSION 3:
SPORTS INJURIES UPDATE II**

What's new in...

Chairs:**Len Funk**Consultant Orthopaedic
Surgeon - Wrightington**Shamim Umarji**Consultant Orthopaedic
Surgeon - London**Sam Gidwani**Consultant
Orthopaedic Surgeon
London**Prof. Jimmy Kauta**Consultant Orthopaedic
Surgeon
Cape Town, South Africa11:00 **Hand and wrist injuries**11:15 **Shoulder injuries**11:30 **Discussion****Sam Gidwani****Prof. Jimmy Kauta**

Room: Citizens Suite**GUEST SPEAKER:
RETURN TO SPORTS AFTER KNEE REPLACEMENT
SURGERY**

introduced by Rhidian Thomas (BOSTAA President)

11:40 - 12:00

**Alasdair Santini**
BASK President**SESSION 4:
ADVANCES IN SPORTS SURGERY****Chairs:****Ravi Badge**
Consultant Orthopaedic
Surgeon - Warrington**Matt Hampton**
Consultant Orthopaedic
Surgeon - Sheffield**Prof. Deiary Kader**
Consultant Orthopaedic
Surgeon SWLEOC**Jonathan Korgaonkar**
Consultant Sports & Exercise
Medicine Specialist
London12:00 **AI in Sports Medicine**12:15 **Innovations in Regenerative Medicine****Prof. Deiary Kader**
Jonathan Korgaonkar

Room: Citizens Suite12:30-12:50 **IBSA UK Symposium****A Modern Approach to Knee Osteoarthritis:
Experience with Sinogel****Prof. Paul Lee****Caring Innovation**12:50 **LUNCH | INDUSTRY EXHIBITION | POSTERS**13:50-14:10 **XIROS Symposium****My fourteen-year experience of ACL reconstruction
with synthetics: What makes a difference to the
clinical outcome?****Dr Klaudiusz Kosowski**

Room: Citizens Suite**GUEST SPEAKER:
KNEE INJURY PREVENTION**

introduced by Fazal Ali (BOSTAA Vice President)

14:15 - 14:40

**Nev Davies**
Reading**BEST POSTER SESSION**

14:40 - 15:00

Five Oral Posters**2 minutes presentation and 2 minutes discussion**

Please refer to abstracts and running order at the end of this programme.

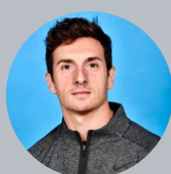
Chairs:**Sanjeev Anand**
Consultant Orthopaedic
Surgeon - Leeds**Irrum Afzal**
Researcher - Academic
Surgical Unit, SWLEOC15:00 **TEA | INDUSTRY EXHIBITION | POSTERS****PODIUM SCIENTIFIC PAPERS**

15:30 - 16:30

Twelve Podium Papers**4 minutes presentation and 1 minute discussion**

Please refer to abstracts and running order at the end of this programme.

Chairs:**Shantanu Shahane**
Consultant Orthopaedic
Surgeon - Chesterfield**Nicolas Nicolaou**
Consultant Orthopaedic
Surgeon - Sheffield

Room: Joes East**PARALLEL SESSION:
ELITE ATHLETE RECOVERY****Chairs:****Neil Jain**Consultant Orthopaedic
Surgeon - Wilmslow**Ravi Badge**Consultant Orthopaedic
Surgeon - Warrington**Ian Horsley**Chartered Physiotherapist
Wakefield**Jeehan Lynch**Consultant MSK
Physiotherapist
Hampshire**Matt Taberner**Leader in Elite Sport
Performance**Ben Rosenblatt**Founder and Director
292 Performance Ltd**David Binningsley**Chartered
Physiotherapist**15:30 Return to Play Following Shoulder Injury:
A Synopsis and Introduction to The Bern Consensus****Ian Horsley****15:40 Shoulder Rehabilitation Top Tips****Jeehan Lynch****15:50 Returning to Play in Elite Sports:
Utilising the Chaos Control Continuum****Matt Taberner (virtual)****16:00 Questions****16:15 Strength & Conditioning Tips in Elite Football Applied
to Common Practice****Ben Rosenblatt****16:25 Hip Rehabilitation in Elite Football****David Binningsley****16:35 Questions****Room:** Citizens Suite**16:30 ESSKA Certification Programme - Andrew Cattell****16:40 BOSTAA Prizes - Fazal Ali and Rhidian Thomas****16:50 Travelling Fellowship Report - Humza Osmani and Tom Lewis****17:00 Annual General Meeting (BOSTAA Members) - Nicolas Nicolaou****17:30 Closing remarks - Fazal Ali**

BEST POSTER SESSION 14:40 - 15:00 | 2 MINS. PRESENTATION + 2 MINS. DISCUSSION**14:40 - 14:44**

(#68)

Radiological Assessment of Patellar Instability: Comparative Analysis of Patients with and without Instability and the Impact of Patellar Stabilisation Surgery**Mustafa Al-Zubaidy**¹, Kira Faircloth², Oday Al-Dadah^{1,2}¹Translational and Clinical Research Institute, Faculty of Medical Sciences, Newcastle University, Framlington Place, NE2 4HH, Newcastle-upon-Tyne, United Kingdom. ²Department of Trauma and Orthopaedic Surgery, South Tyneside District Hospital, Harton Lane, South Shields, NE34 0PL, South Shields, United Kingdom

Background: Patellar instability (PI) is a clinical diagnosis often complicated by symptom overlap with other knee pathologies and spontaneous relocation of the patella. Anatomical variations are key risk factors, highlighting the role of radiological investigations in assessing underlying pathology. Inconsistent measurement parameters and limited comparative data reduce diagnostic reliability. This study aimed to compare radiological parameters between patients with and without PI, and to assess how these parameters change following patellar stabilisation surgery.

Methods: This case-control study compared magnetic resonance imaging (MRI) and X-ray radiological parameters between patients with recurrent PI and Controls. Pre- and post-operative imaging was analysed in the PI group. Eleven validated radiological measurements, including patellofemoral joint angles and patellar height indices were evaluated.

Results: Fifty-five knees in the PI group and 50 knees in the Control group were analysed. Pre-operatively, significant differences were found for all patellar height indices ($p < 0.001$) and patellofemoral measurements ($p < 0.05$), except the congruence angle. Post-operatively, all patellar height measurements improved in the PI group ($p < 0.05$), with only the sulcus angle improving ($p = 0.005$) for patellofemoral measurements. Significant differences were observed between MRI and X-ray measurements ($p < 0.05$).

Conclusion: Radiological parameters differ significantly between unstable and stable knees, with improvement following surgery. Patellar height was the most consistent marker of instability. Discrepancies between MRI and X-ray findings suggest a need for modality-specific normative values. These results reinforce the value of radiological assessment in PI and support standardisation to improve diagnostic accuracy.

14:44 - 14:48

(#91)

Population-based Prevalence of Femoroacetabular Impingement: a Systematic Review and Meta-analysis**Ignatius Liew**¹, Wen Xian Low², Mary Fortune³, Vikas Khanduja¹¹Cambridge University Hospital, Cambridge, United Kingdom. ²East Suffolk and North Essex NHS Foundation Trust, Ipswich, United Kingdom. ³University of Cambridge, Cambridge, United Kingdom

Background: Femoroacetabular impingement (FAI) is a significant long-term risk factor for osteoarthritis. Despite osteoarthritis representing a global disease burden, the association and prevalence of FAI remain uncertain. This systematic review aims to quantify the global, population-based prevalence of FAI.

Methods: MEDLINE, Embase, and Cochrane databases were searched from inception to August 2024 for population-based studies reporting the prevalence of femoroacetabular impingement syndrome (FAIS) as defined by the Warwick Agreement; cam, pincer, or mixed morphologies; or alpha and lateral central edge angles (LCEA) in the general population. Meta-analysis was conducted using the inverse-variance method. The protocol was registered on PROSPERO (CRD42024590275).

Results: 18 studies from eight countries ($n = 63,965$; 52% female; mean age 63.4, range 21–96) were included. Only one study ($n = 500$) reported FAIS prevalence at 3.0% [95%CI: 1.5–4.5] (male: 3.4%, female: 2.7%). Pooled prevalence estimates for cam, pincer and mixed morphologies were: 15.22% [95%CI: 4.9–38.5] (male: 22.4%, female: 6.85%), 11.6% [95%CI: 3.77–30.59] (male: 10.9%, female: 11.56%), and 1.6% [95%CI: 0.97–2.57] (male: 2.9%, female: 0.8%) respectively. Cam appeared less prevalent in East Asian vs Western populations (4.81% vs 9.21%). Mean alpha angle and LCEA were 49.1° [95%CI: 42.37–55.89], and 33.7° [95%CI: 30.5–36.9] respectively. Definitions varied for cam (alpha angle $\geq 60^\circ$ in 70%) and pincer morphologies (LCEA $\geq 40^\circ$ in 62.5%), with 14 studies (78%) relying solely on anteroposterior radiographs for analysis. Only one study came from a low- or middle-income country (5%).

Conclusion: There is a lack of standardised, population-based data on FAIS prevalence, with inconsistent definitions limiting pooled estimates. Despite limitations, existing evidence indicates that FAIS and FAI-related hip morphologies appear prevalent in the general population. High-quality, representative studies using unified criteria and diverse imaging are needed to inform global osteoarthritis burden and healthcare planning, especially in underrepresented regions.

BEST POSTER SESSION 14:40 - 15:00 | 2 MINS. PRESENTATION + 2 MINS. DISCUSSION**14:48 - 14:52**

(#82)

Outcomes of implant-mediated guided growth for paediatric anterior cruciate ligament injury: A systematic review**Jessica Treves**^{1,2}, Kiyana Mirza³, Wen Xian Low⁴, Ignatius Liew²¹University of Cambridge, Cambridge, United Kingdom. ²Cambridge University Hospitals, Cambridge, United Kingdom. ³Norfolk & Norwich University Hospital, Norwich, United Kingdom. ⁴East Suffolk and North Essex NHS Foundation Trust, Ipswich, United Kingdom

Background: Angular deformities of the knee can predispose patients to anterior cruciate ligament (ACL) injury and adverse ACL reconstruction (ACLR) outcomes. In skeletally immature patients, these deformities can be corrected by implant-mediated guided growth (IMGG). The objective of this review is to assess the evidence on IMGG outcomes in skeletally immature patients with ACL injury.

Methods: MEDLINE, Embase, and Cochrane Library were searched from inception to July 2025. Two blinded researchers screened 1256 unique publications according to PRISMA guidelines. Included studies featured paediatric patients who underwent IMGG as part of management for ACL injury. Studies investigating the correction of growth arrest secondary to ACLR were excluded. Subgroup analysis was performed where relevant.

Results: Six studies, comprising 25 patients (80% male, 20% female), met the inclusion criteria. Approximate mean patient age was 13.28 years. 96% of patients underwent ACL reconstruction. Of the ACLR methods described, 50% were transphyseal, and 50% used a quadriceps tendon autograft. None were bilateral. Of the IMGG methods described, 64% of procedures used an eight plate, and 96% were performed concomitant with ACLR. 40% were bilateral. The most common angular deformity was genu valgum (92%), followed by elevated posterior tibial slope (PTS; 16%).

Where calculable, mean correction rates for mechanical axis deviation (MAD) and PTS were 0.0425°/month and 0.81°/month, respectively. Postoperative residual deformity was reported in one patient, whose residual valgus was greater in the non-ACLR limb. No other studies reported discrepancies in deformity correction between the ACLR and non-ACLR limb. Although 2 patients experienced slight laxity following ACLR, there were no additional accounts of instability. Postoperative complications included two cases of graft re-rupture, and one case of arthrofibrosis.

Conclusions: This review highlights that concomitant ACLR and IMGG is associated with angular deformity correction and improved functional stability of the paediatric knee.

14:52 - 14:56

(#85)

onMRI – AI-powered Objective MRI Analysis for Quantifiable Musculoskeletal Imaging**Paul Lee**, Tanvi Verma

MSK Doctors, Sleaford, United Kingdom

Background: Conventional musculoskeletal MRI interpretation relies on subjective visual grading, introducing inter-reader variability that undermines clinical consistency and limits the early detection of joint degeneration or therapeutic response. The onMRI platform addresses this gap by transforming MRI into a standardised, quantitative tool using AI-powered segmentation and biomarker extraction.

Methods: A cohort of 150 musculoskeletal MRI scans was analysed using onMRI. Inclusion criteria encompassed meniscal injury, post-operative ACL reconstruction, and patients undergoing regenerative cartilage therapy. Exclusion criteria included any patients who declined data-sharing consent. It leverages deep learning segmentation to identify cartilage, menisci, and bone structures, generating 3D anatomical reconstructions and objective measurements. All scans were processed using uniform anatomical definitions, allowing cross-patient and longitudinal comparisons.

Results: The platform successfully segmented cartilage, menisci, and bone structures across diverse anatomical states. It computed reproducible quantitative biomarkers, including cartilage thickness, volume, contact area, and joint space width. The AI model successfully segmented cartilage, menisci structures in 100% of scans, generating high-fidelity 3D models.

The platform revealed structural changes not reported in standard MRI evaluations, demonstrating superior sensitivity to sub-radiological progression and early regenerative response.

Conclusion: onMRI enables the quantification of joint structures in a consistent, reproducible manner, offering a powerful alternative to subjective MRI interpretation. It holds significant promise for improving diagnostic accuracy, monitoring disease progression, and evaluating the efficacy of regenerative and surgical interventions in musculoskeletal care. Further large-scale validation is underway to integrate these imaging biomarkers with clinical outcomes and motion data.

BEST POSTER SESSION 14:40 - 15:00 | 2 MINS. PRESENTATION + 2 MINS. DISCUSSION**14:56 - 15:00**

(#74)

Informing the future of extended reality (XR) hologram viewing in knee arthroscopy: A pilot randomised controlled trial comparing XR with traditional screen stack systems**Mohamed Youssef**, Alexandros Papadopoulos, Amit Chawla, Nayef Aslam-Pervez
Hull Royal Infirmary, Hull, United Kingdom

Background: Physical monitors on traditional stack systems have been used for years in viewing the live arthroscopic feed. Extended reality (XR) platforms such as the Microsoft HoloLens are emerging as tools that allow for viewing on a hologram that can be manipulated to move around the surgeon's space. XR has the potential to improve ergonomics, Visualisation, and procedural flow by providing head-mounted, hands-free holographic viewing. However, its utility compared to traditional arthroscopic stack systems remains underexplored.

Methods: A randomised, controlled, crossover trial was conducted with ten novice medical trainees. Each participant performed two simulation tasks in the ArthroBox from Arthrex (washer transfer and simulated meniscectomy on banana skin) using both XR and stack modalities. Primary outcomes included ASSET (Arthroscopic Surgical Skill Evaluation Tool) scores. Secondary outcomes included task time and subjective usability feedback. Videos were scored by orthopaedic consultants blinded to the viewing intervention and participant.

Results: Total ASSET scores and task completion times did not significantly differ between XR and stack modalities. However, two key ASSET domains—Safety (Domain 1) and Flow of Procedure (Domain 5)—were significantly lower with XR ($p=0.014$ and $p=0.013$, respectively). Instrument Dexterity and Camera Control trended lower with XR. Subjective feedback showed a paradoxical trend: participants who rated XR as easier to use or preferable had lower performance scores. Correlation analysis revealed significant inverse associations between ease-of-use ratings and actual XR performance ($r = -0.69$, $p = 0.018$). Participants with prior video gaming experience showed higher ASSET scores using XR, suggesting gaming may enhance XR adaptability.

Conclusion: Although XR offers theoretical ergonomic and visualisation benefits, its current implementation may hinder novice performance in arthroscopy simulation. Structured training, interface refinements, and further evaluation in experienced cohorts are essential before conclusions can be made. This pilot provides data to guide future XR development in surgical education.

PODIUM SCIENTIFIC PAPERS 15:30 - 16:30 | 4 MINS. PRESENTATION + 1 MIN. DISCUSSION**15:30 - 15:35**

(#55)

Medium-Term Functional Outcomes Comparing Soft-Tissue Autografts versus Allografts in Primary ACL Reconstruction: A Systematic Review and Meta-AnalysisSaran Gill¹, Aikaterini Eleftheriadou², Bhargava Govardhana³, Xinning Li⁴, Shezhaad Khan², Fares Haddad⁵, **Khalid Al-Hourani**⁶¹Imperial College London, London, United Kingdom. ²Frimley Knee Unit, Frimley Health NHS Foundation Trust, Surrey, United Kingdom. ³New College, Oxford Medical School, Oxford, United Kingdom. ⁴Department of Orthopedic Sports Medicine, Boston Medical Center, Boston, USA. ⁵University College London, London, United Kingdom. ⁶Frimley Knee Unit, Frimley Health NHS Foundation Trust, Surrey, USA

Background: Anterior cruciate ligament reconstruction (ACLR) is a widely performed procedure, yet the clinical and functional outcomes of soft tissue autografts compared to allografts remain unclear. While previous studies have focused on surgical techniques and failure rates, few have systematically analysed functional outcomes following ACLR. This study aimed to assess medium-term functional patient-reported outcome measures (PROMs) as the primary outcome and clinical outcomes as the secondary outcome following ACLR.

Methods: A systematic review and meta-analysis followed PRISMA guidelines and was pre-registered on PROSPERO. A comprehensive search of databases, including PubMed, Ovid MEDLINE, and Embase, was conducted up to June 2024. Eligible studies included skeletally mature patients undergoing primary ACLR, with reported clinical and functional outcomes at minimum 24 months. Data were analysed using random-effects models to calculate standardized mean differences (SMDs) and odds ratios (ORs).

Results: Of 5292 studies screened, 12 were included, encompassing 1,038 patients. Of the functional scores, IKDC outcomes (SMD = 0.27; 95% CI 0.14 to 0.39; $p < 0.01$), Tegner activity scores (SMD = 0.18; 95% CI 0.03 to 0.34; $p = 0.02$) significantly favoured autografts, with Lysholm scores (SMD = 0.14; 95% CI -0.02 to 0.29; $p = 0.08$) showing no significant differences between graft types. For clinical outcomes, Lachmann's grades significantly favoured allografts (SMD = -0.56; 95% CI -1.09 to -0.03; $p = 0.04$). Revision rates (OR = 1.88; 95% CI 0.70 to 5.00; $p = 0.21$) and graft re-tear rates (OR = 0.84; 95% CI 0.32 to 2.17; $p = 0.72$) did not differ significantly between graft types.

Conclusion: The study found that autografts and allografts yield variable functional and clinical outcomes in ACLR at minimum 24 month follow up, with autografts showing modest yet statistically significant advantage in IKDC and Tegner activity scores, but not in Lysholm functional score at and beyond 24 months. However, Lachmann's scores suggested better stability with allografts.

15:35 - 15:40

(#56)

Allografts in Primary Anterior Cruciate Ligament Reconstruction: A Scoping Review of the Literature Highlighting Reporting Standards**Khalid Al-Hourani**¹, Saran Gill², Bhargava Govardhana³, Eoghan Hurley⁴, Shezhaad Khan¹, Alastair Davidson¹, Xinning Li⁵, Iain Murray⁶, Fares Haddad⁷¹Frimley Knee Unit, Frimley Health NHS Foundation Trust, Surrey, United Kingdom. ²Imperial College London, London, United Kingdom. ³New College, Oxford Medical School, Oxford, United Kingdom. ⁴Department of Sports Medicine, Duke University, North Carolina, USA. ⁵Department of Orthopedic Sports Medicine, Boston Medical Center, Boston, USA. ⁶Edinburgh Orthopaedics, The Royal Infirmary of Edinburgh, Edinburgh, United Kingdom. ⁷University College London Hospitals, The Princess Grace Hospital and The NIHR Biomedical Research Centre at UCLH, London, United Kingdom

Background: There has been a renewed interest in the use of allografts for anterior cruciate ligament (ACL) reconstruction. This study aims to conduct a scoping review of allograft use in primary ACL reconstruction and to examine the variability in outcome reporting within the existing literature.

Methods: The study was conducted in line with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA), and also utilised Arksey and O'Malley's established five stage process for scoping reviews in order to map the literature for allograft use in primary ACL reconstruction. Following screening to identify eligible studies, data was extracted and mapped to provide a descriptive and thematic analysis.

Results: A total of 421 studies were identified from the initial search with 77 studies eligible for final scoping review published from 1993 to 2024. The majority of studies were published from the use and China (56/77, 72.3%), and only nine studies (9/77, 11.7%) were level 1. Key variables such as graft diameter (27/77, 33.8%), graft processing (27/77, 35.1%) and cost of graft (3/77, 3.9%) were significantly under-reported. Of the clinical outcomes, the Lachman score (45/77, 57.1%), pivot shift grade (45/77, 58.4%) and graft re-rupture rate (42/77, 54.5%) were reported the most. For functional outcomes, two predominant scores were recorded, the International Knee Documentation Committee score (52/77, 67.5%) and the Tegner-Lysholm knee score (48/77, 62.3%). A total of thirty functional outcomes were recorded spanning all studies signifying great variability.

Conclusion: This scoping review identified 77 studies which analysed allografts in primary anterior cruciate ligament reconstruction. There is great variability in the reporting standards, with significant under-reporting of important variables. Further research is required to develop standardised reporting criteria in order to accurately reflect the outcomes of allografts in primary ACL reconstruction.

PODIUM SCIENTIFIC PAPERS 15:30 - 16:30 | 4 MINS. PRESENTATION + 1 MIN. DISCUSSION**15:40 - 15:45**

(#48)

In frozen shoulder patients is it effective to add arthroscopic rotator interval excision procedure to the manipulation for better clinical results?**Ahmet Firat Berkay¹**, Selçuk Bölükbaşı², Ulunay Kanatlı², Osman Alaşık³¹Baltalimani Bone Diseases Training and Research Hospital, Istanbul, Turkey. ²Gazi University Hospital, Gazi University, Ankara, Turkey. ³Buldan Chest Diseases Hospital, Denizli, Turkey

Background: In the management of the patients with frozen shoulder, we questioned whether manipulation under anaesthesia alone is adequate for improving patient function, pain, and range of motion, or if the addition of arthroscopic rotator interval excision provides further clinical benefit.

Methods: We assessed 44 patients who were operated between 2015 and 2018 and diagnosed as frozen shoulder, retrospectively. Preoperatively, we evaluated UCLA Shoulder score, shoulder range of motion. Group 1 were manipulated under anaesthesia. We applied additionally arthroscopic rotator interval excision to Group 2. We followed for a minimum 24 months. At final follow up, patients were examined in our clinic, UCLA (University of California Los Angeles Score), CONSTANT, DASH (The disabilities of the arm, shoulder and hand), range of motion of shoulders were recorded.

Results: In group 1, flexion range of motion, UCLA score, UCLA pain score improved significantly from 118.25±35.02 degrees to 163.25±31.55 degrees ($p<.0001$), 17.05±4.55 to 31.15±5.05 ($p<.0001$), 4.90±2.53 to 8.50±1.82 ($p<.001$) respectively.

In group 2, at final follow-up flexion range of motion, UCLA score, UCLA pain score improved significantly from 106.04±38.13 to 177.29±9.88 degrees ($p<.0001$) degrees, 18.54±4.43 to 32.20±4.41 ($p<.0001$), 5.96±2.29 to 8.50±2.14 ($p<.001$) respectively.

At final follow-up between group group 1 and group 2 regarding flexion range of motion ($p=0.030$), flexion strength ($p=0.034$), improvement of flexion range of motion ($p=0.016$), abduction range of motion ($p=0.030$), abduction strength ($p=0.030$), group 2 was significantly better. Satisfactory results were obtained in the evaluation at the final follow up in both groups.

Conclusion: We recommend arthroscopic rotator interval excision and manipulation under anaesthesia to be performed together in surgical treatment of frozen shoulder to fully restore the range of motion and strength.

15:45 - 15:50

(#80)

Not All Hamstrings Are Equal: A Systematic Review on Heterogeneity in Hamstring ACL Reconstruction and Its Implications for Graft Comparisons**Jonathan Byers**, Harvey George, Matthew Hampton

Sheffield Teaching Hospitals, Sheffield, United Kingdom

Background: Hamstring autografts are widely used for ACL reconstruction (ACLR), but outcomes may vary due to heterogeneity in graft composition, diameter, fixation, and tunnel technique. This study aims to review hamstring heterogeneity, its impact on functional outcomes, and implications for studies comparing “hamstring” grafts versus other techniques.

Methods: Following PRISMA guidelines, we systematically reviewed studies (Jan 2015–Sept 2025) reporting outcomes of hamstring ACLR stratified by composition, calibre/augmentation, fixation, or tunnel strategy. Outcomes included PROMs, return to sport, laxity, and all-time revision. Fifty-one studies were included (4 RCTs, 11 meta-analyses, 29 cohorts, 4 registries, 3 reviews).

Results:

- Composition: Semitendinosus-only and Semitendinosus + Gracilis grafts provided equivalent PROMs, laxity, and revision risk at 24 months with early strength recovery favouring ST-only.
- Calibre/augmentation: Grafts <8 mm showed higher failure; multi-stranding, hybrid augmentation, or suture tape restored durability but conferred no further benefit once ≥8 mm.
- Tunnel technique: All-inside sockets reduced tunnel widening but not function or revision. Anteromedial drilling improved rotational stability compared with transtibial, but with similar PROMs.
- Fixation: Suspensory fixation showed slightly less laxity and rupture risk than screws, though differences were insignificant and PROMs equivalent.

Conclusion: Hamstring ACLR outcomes are driven primarily by graft calibre and tunnel anatomy, while fixation and socket strategy carry secondary effects. Differences between hamstrings and other autografts may reflect graft calibre and technical variation rather than graft type. Future graft comparisons should consider these variables and stratify by composition, calibre, augmentation, fixation, and tunnel placement to allow valid graft comparisons.

PODIUM SCIENTIFIC PAPERS 15:30 - 16:30 | 4 MINS. PRESENTATION + 1 MIN. DISCUSSION**15:50 - 15:55**

(#47)

Sex Differences in Femoral Intercondylar Notch Morphology and ACL Injury Risk: A Systematic ReviewJoachim Ho¹, Ernest Chew², **Amit Chawla**³, Preemal Patel², Sanjay Anand^{4,5,6}¹University College London, London, United Kingdom. ²Frimley Health NHS Foundation Trust, Slough, United Kingdom. ³Hull University Teaching Hospitals NHS Trust, Hull, United Kingdom. ⁴Fortius Clinic, London, United Kingdom. ⁵OrthTeam Centre, Manchester, United Kingdom. ⁶University of Manchester, Manchester, United Kingdom

Introduction: Anterior Cruciate Ligament (ACL) injuries are significantly more prevalent in female athletes, with up to eight times higher incidence than in males. Anatomical factors, particularly the morphology of the femoral intercondylar notch—its width, Notch Width Index (NWI), and shape—have been proposed as potential contributors to this disparity. This systematic review and meta-analysis aim to synthesize existing evidence on sex differences in femoral notch morphology and assess their relevance to ACL injury risk.

Methods: A comprehensive literature search was performed across PubMed, Web of Science, and Cochrane Library databases. Studies comparing femoral notch width, NWI, or shape between sexes in adult human populations were included. Twenty-five eligible studies were identified and assessed for risk of bias using the Newcastle–Ottawa Scale. Due to methodological heterogeneity, particularly in imaging techniques, a narrative synthesis was conducted, supported by t-tests and chi-squared tests for statistical comparisons.

Results: No significant difference in notch width or NWI was found between ACL-injured males and females. However, within each sex, ACL-injured individuals exhibited significantly smaller notch widths compared to uninjured controls ($p < 0.05$). NWI did not significantly differ across any group comparisons. Notch shape analysis revealed no sex-based differences within the ACL-injured cohort, but the 'A-shape' notch was significantly more prevalent in ACL-injured individuals versus controls, with a notably stronger association in females ($p < .00001$).

Conclusion: A narrower femoral notch width is a sex-independent risk factor for ACL injury. However, it does not explain the higher incidence in females. Notch shape, particularly the stenotic 'A-shape', demonstrated a stronger association with injury risk, especially in females. These findings suggest that notch morphology, rather than relative measurements like NWI, may better predict ACL injury and merit further investigation. Future studies should prioritize 3D quantification of notch shape and incorporate sex-disaggregated reporting to guide targeted ACL injury prevention.

15:55 - 16:00

(#61)

Shoulder Injuries in Rugby Union: a Systematic Review and Meta-Analysis**Jack Doyle**¹, Matthew Bellamy², Kieran Fowler¹, Harry Keiller¹, Roshan Gunasekera², Lennard Funk³¹University of Sheffield, Sheffield, United Kingdom. ²Sheffield Teaching Hospitals NHS Foundation Trust, Sheffield, United Kingdom.³HCA, The Wilmslow Hospital, Wilmslow, United Kingdom

Background: Shoulder injuries are common in Rugby Union, resulting in prolonged absence and considerable burden. Reported incidence, severity, and mechanisms vary widely, reflecting the multiple high-impact actions in the sport. Various management approaches exist to treat a wide range of pathologies. This systematic review and meta-analysis aimed to synthesise evidence on the incidence, mechanisms, and treatment of shoulder injuries in rugby.

Methods: PUBMED, SCOPUS, and WEB OF SCIENCE were searched on 1st June 2025 for studies published in the past 25 years. Eligible designs included randomised controlled trials, cohort, case-control, and case series reporting on epidemiology, mechanisms, or management of rugby-related shoulder injuries. Review methods followed PRISMA guidelines. Risk of bias was assessed using the Cochrane tool (RCTs) and Newcastle Ottawa Score (observational studies). Data were narratively synthesised, with meta-analysis performed where appropriate.

Results: From 1,099 abstracts screened, 78 studies were included. The pooled match incidence was 5.7 injuries/1,000 player-hours (95% CI 3.12–8.01), with higher rates in male high school/university (8.97/1,000 hours) and elite players (10.70/1,000 hours). Training incidence was considerably lower (0.08/1,000 hours). Mean severity was 57.3 days (95% CI 48.93–65.63), and mean burden was 37.4 days/1,000 hours. Tackling was the predominant injury mechanism, most often affecting the tackler. Surgical stabilisation was frequently employed for anterior instability; Bankart, Latarjet, and Bristow procedures all produced favourable outcomes. Pooled postoperative ROWE scores were 90.63, 87.67, and 88.17, respectively, with overlapping 95% confidence intervals. Evidence on female athletes was limited.

Conclusions: Shoulder injuries in rugby occur far more often in matches than in training, result in prolonged time loss, and are most commonly sustained in tackling. Surgical stabilisation yields good outcomes, though more high-quality comparative studies are warranted. Greater attention to prevention, improved reporting of mechanisms, and focused research on female players should be prioritised.

PODIUM SCIENTIFIC PAPERS 15:30 - 16:30 | 4 MINS. PRESENTATION + 1 MIN. DISCUSSION**16:00 - 16:05**

(#70)

Defining Arthroscopic Safe Zones for Patient-Specific Suprascapular Nerve Decompression: A Cadaveric Study**Dave Duru**¹, Salma Chaudhury², Niel Kang², Cecilia Brassett¹¹University of Cambridge, Cambridge, United Kingdom. ²Cambridge University Hospitals, Dept of Trauma & Orthopaedics, Cambridge, United Kingdom

Background: Arthroscopic suprascapular nerve (SSN) decompression has emerged as a minimally invasive alternative for treating nerve entrapment, associated with massive rotator cuff tears and overhead athletic injuries. However, the lateral-to-medial arthroscopic approach to the suprascapular notch places critical neurovasculature at risk. There are limited anatomical guidelines to inform surgeons performing SSN decompression. This study aimed to quantify the proximity of the SSN and suprascapular artery (SSA) to the lateral superior transverse scapular ligament (STSL) attachment at the suprascapular notch and delineate arthroscopic distances from the lateral acromion and acromioclavicular (AC) joint to lateral STSL, factoring patient-specific scapular dimensions (height, spine length, and width).

Methods: Twenty cadaveric shoulders were dissected. Distances from the SSN and SSA to lateral STSL were recorded. Distances from the lateral STSL to lateral acromion and AC joint were recorded and correlated with measured scapular dimensions.

Results: The SSN was 7.0 ± 2.7 mm (range: 2.6–11.8 mm) and SSA was 4.2 ± 2.5 mm (1.4–9.5 mm) medial to the lateral STSL. The lateral STSL was 76.9 ± 9.9 mm (61.6–91.9 mm) from lateral acromion and 53.2 ± 8.2 mm (37.8–70.1 mm) from AC joint, both distances correlating with scapular dimensions ($r = 0.45$ – 0.65 ; $p < 0.05$).

Conclusions: The SSA and SSN may lie as close as 1.4 mm and 2.6 mm from lateral STSL, defining a new “lateral danger zone.” Safe arthroscopic blunt dissection may occur 3.5 cm medial to AC joint and 6.0 cm medial to lateral acromion, but factoring patient-specific scapular dimensions may enhance pre-operative planning, patient safety, and surgical training.

16:05 - 16:10

(#86)

Geographic Disparities in ACL Reconstruction Research, 1994–2024.**Ben Fitzjohn**, Neil Jain

Northern Care Alliance NHS Foundation Trust, Manchester, United Kingdom

Background: Anterior cruciate ligament (ACL) injuries are among the most common and impactful knee injuries worldwide, with significant implications for athletes and the general population. Research into ACL reconstruction plays a critical role in advancing surgical techniques, rehabilitation, and outcomes. However, little is known about the global distribution of ACL-related research and potential biases in geographic contributions, study types, or publication venues. This study evaluates geographic disparities in ACL reconstruction research from 1994 to 2024.

Methods: A comprehensive PubMed search was conducted to identify ACL-related publications from 1994 to 2024 using the terms: (“ACL” OR “anterior cruciate ligament”) AND (“repair” OR “reconstruction” OR “surgery”). A total of 24,587 articles were retrieved. Stratified sampling was performed using a custom VBA script in Excel to obtain a representative sample of 6,000 articles. After data cleaning and applying exclusion criteria, 4,492 articles remained for analysis. Descriptive analysis and pivot tables were used to explore trends in publication volume, geographic origin, study type, and journal distribution.

Results: Europe (53%) and North America (38%) contributed the majority of publications, while Asia accounted for the least (6%). The United States was the largest individual contributor (38%), followed by Germany (22%). ACL publication volume increased by 676% over the study period, with Asia showing the most recent growth (+314% from 2020–2024). Six journals, all from Europe and North America, accounted for 29% of publications. By study type, Europe dominated clinical trials (65%) and comparative studies (60%), while North America led in systematic reviews/meta-analyses (46%) and case reports (46%).

Conclusion: This study demonstrates substantial regional disparities in ACL research output and focus. While Europe and North America dominate, Asia's recent growth is notable. Other regions remain underrepresented. Efforts to strengthen research infrastructure and access in underrepresented regions are essential for a globally balanced ACL evidence base.

PODIUM SCIENTIFIC PAPERS 15:30 - 16:30 | 4 MINS. PRESENTATION + 1 MIN. DISCUSSION**16:10 - 16:15**

(#77)

Patellotrochlear Index of 25% underestimates patella alta in moderate and severe trochlea dysplasia**Harvey George**, Matthew Bellamy, Kiran Madhvani, James Stoddard, Graeme Hancock, Matthew Hampton
Northern General Hospital, Sheffield, United Kingdom

Background: The aim of this study was to assess the accuracy of the patellotrochlear index (PTI) in correctly identifying patella alta in different severities of trochlear dysplasia. We hypothesise that PTI fails to appreciate true case numbers of patella alta in severely dysplastic trochleas.

Methods: This is a retrospective comparative radiographic study. Pre-operative sagittal knee radiographs and Magnetic Resonance Imaging (MRI) were reviewed. The cases were grouped by degree of trochlea dysplasia using the Oswestry Bristol Classification (OBC). To identify all four different groups of trochlea dysplasia, patella instability cases were reviewed, alongside MPFL, TTO and trochleoplasty; patients who underwent ACL reconstruction were reviewed to identify enough suitable patients with normal trochlea morphology. Overall, 120 cases were included. Patella height measurements were made using both the PTI and the Caton Deschamps index (CDI). The trochlear length was measured on MRI scans using the trochlea centre edge angle (TCEA). Statistical analysis, including McNemar's tests, linear regression, one-way ANOVA, and Pearson's correlation, were conducted with significance set at $p < 0.05$.

Results: In normal and mild dysplastic trochleas there was no significant difference in number of cases of patella alta identified by CD ratio and PTI ($p > 0.05$). In moderate (OBC 3) and severe (OBC 4) trochlea dysplasia there was only 30% and 40% agreement, respectively ($p < 0.05$) for CDI ratio and PTI. Sensitivity and specificity analysis showed 30% had a diagnostic CDI ratio with a negative PTI. Linear regression analysis indicated that a PTI of approximately 0.42 is a potential novel diagnostic point in moderate and severe dysplasia.

Conclusions: This study demonstrates that the PTI fails to reliably diagnose patella alta in the setting of moderate and severe trochlea dysplasia, we suggest a new diagnostic threshold of 0.42 to diagnose patella alta in such cases.

16:15 - 16:20

(#53)

Use of a Quadrupled Hamstring Tendon (QHT) graft in paediatric anterior cruciate ligament reconstruction has excellent patient outcomes and low complication rates**Omar Mostafa**¹, Muaaz Tahir¹, Loiy Alkhatib², Amit Meena³, Darren de SA⁴, Ejaz Mughal⁵, Peter D'Alessandro⁶, Nicolas Nicolaou⁷, Shahbaz Malik⁸

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Background: This study aims to perform a systematic review to assess complication rates and clinical outcomes after quadrupled hamstring tendon (QHT) for Anterior Cruciate Ligament Reconstruction (ACLR) in the paediatric population.

Methods: A systematic literature search study was conducted following PRISMA guidelines and registered prospectively. Comparative and non-comparative studies that explicitly used QHT for ACLR in skeletally immature patients were included. Patient-reported Outcome Measures (PROMs), radiographic measurements and functional outcomes were reviewed. Quality assessment was performed using the Newcastle Ottawa Score (NOS). Regression analysis was performed on graft diameter and rate of graft failure.

Results: 34 studies met the eligibility criteria with 1384 patients. The mean age was 13.5 years with 47.3% males and mean follow-up of 44.2 months. The overall complication rate was 14.2%, graft failure was 6.5% and revision surgery was 2.6%. The mean postoperative Lysholm score was 93.0, the Tegner score was 7.3, and the IKDC score was 91.40. Return to Activity was 88%. The mean KT-1000 was 1.59 mm. The mean postoperative mLDFA was 91.0 degrees, mMPTA was 87.2 degrees and femorotibial angle was 2.59 degrees.

Conclusion: Quadrupled hamstring tendon graft in ACLR offers good to excellent patient reported outcomes and low incidence of growth arrest. The graft re-rupture rate is up to 6.5%.

PODIUM SCIENTIFIC PAPERS 15:30 - 16:30 | 4 MINS. PRESENTATION + 1 MIN. DISCUSSION**16:20 - 16:25**

(#73)

Orthobiologic Augmentation of ACL Reconstruction: Systematic Review and Meta-regression with MIBO Compliance Analysis**Patrycja Oratowska**¹, Navnit Makaram², Jonathan Super², Iain Murray²¹University of Edinburgh Medical School, Edinburgh, United Kingdom. ²Edinburgh Orthopaedics, Department of Trauma & Orthopaedic Surgery, Edinburgh, United Kingdom

Background: Anterior cruciate ligament (ACL) reconstruction with autograft is standard for rupture but carries significant re-rupture risk. Evidence for autologous orthobiologics is limited by poor methodological reporting, causing variability in mechanisms of action. To improve consistency, the Minimum Information for Studies Evaluating Biologics in Orthopaedics (MIBO) guidelines were developed. This is the first study to pool outcomes by orthobiologic type and assess MIBO adherence.

Methods: PRISMA was followed (PROSPERO: CRD42025646549). PubMed, MEDLINE, and EMBASE were searched (11/02/2025) for prospective English-language clinical studies evaluating blood products, cell therapies, or growth factors in ACL reconstruction after complete/partial rupture. Outcomes included re-rupture, function, pain, return to sport/work, and activity. In-vitro, ex-vivo, abstracts, and case reports were excluded. Risk of bias was assessed with ROB-2 and ROBINS-I V2. Random-effects meta-analyses, subgroup, meta-regression, and funnel plots assessed significance, heterogeneity, and bias.

Results: All thirteen studies (2008–2024), comprising 855 patients (475 augmented, 380 controls) carried high risk of bias. MIBO adherence averaged 30.4% (blood products) and 46% (stem cells). Re-rupture was 1.0% (1.1% augmented, 0.9% control, $k=5$). Orthobiologics may delay re-rupture, though no link with return to sport/work could be shown. No differences were seen in pain or activity. Function improved by 2.76% (MD=2.76%, 95% CI: [0.34%, 5.18%], $p=0.03$, $k=11$), but clinical significance was low (SMD=0.39) with substantial heterogeneity ($I^2=65.3\%$, 95% CI: [29.2%, 82.9%], $p=0.003$). Graft choice explained 86.3% of heterogeneity ($k=9$, $\beta=1.80\%$, 95% CI: [-2.27%, 5.86%], $R^2=86.3\%$, $p=0.026$), with semitendinosus-gracilis autografts yielding an additional 2.97% functional improvement (MD=5.73%, 95% CI: [4.09%, 7.37%]). Platelet-rich plasma alone improved function (MD=2.70%, 95% CI: [0.79%, 4.61%], $p=0.006$; SMD=0.43).

Conclusions: Orthobiologics may enhance knee function after ACL reconstruction, particularly platelet-rich plasma. Findings underscore the need for MIBO adherence to steer future research towards standardized methodological reporting in the pursuit of establishing whether orthobiologics can reduce re-rupture.

16:25 - 16:30

(#54)

Factors that Influence Decision-Making Regarding Management of ACL Injuries: A UK, Australian and Canadian-Based Delphi Study**Greg Young**¹, Neil Jain², Cari Thorpe³, Nick Dobbin³¹Guy's and St Thomas' NHS Foundation Trust, London, United Kingdom. ²Manchester Institute of Health and Performance, Manchester, United Kingdom. ³Manchester Metropolitan University, Manchester, United Kingdom

Background: Management of anterior cruciate ligament (ACL) injuries remains highly debated, with conflicting findings within the literature. As the landscape within public health systems alters and competition within elite sport increases, this study aims to establish expert consensus on recommendations of ACL injury management on those impacted by lengthy waiting lists for surgery in public healthcare and amongst elite athletes.

Methods: Twenty-two experts from around the world completed a three-round survey based on the Delphi method of achieving consensus. Participants were asked to agree or disagree using a Likert scale for statements developed and based on a review of recent literature in Round I. Feedback was obtained to improve the existing statements and incorporate any additional information. Round II and III used Likert-scale voting to assess consensus, which was defined as $\geq 75\%$ agreement.

Results: Consensus was achieved in 11/20 statements, including strong consensus recommending ACL-Reconstruction (ACL-R) in patients participating in cutting, twisting, or pivoting sports. Agreement suggested patients may avoid surgery if undertaking successful rehabilitation whilst waiting for surgery. Most experts agreed rehabilitation alone isn't recommended for elite athletes, and concomitant injuries are the most important finding when determining surgical or conservative management.

Conclusions: Rehabilitation alone is not recommended for elite athletes in treatment for ACL tears. Re-assessment prior to ACL-R is crucial for non-elite athletes. Key areas of non-consensus included the impact of surgery or rehabilitation on secondary complications, graft choice and the inclusion of lateral extra-articular procedures, suggesting further research is required in these areas.

POSTERS DISPLAY**POSTER 1****RADIOLOGICAL ASSESSMENT OF PATELLAR INSTABILITY: COMPARATIVE ANALYSIS OF PATIENTS WITH AND WITHOUT INSTABILITY AND THE IMPACT OF PATELLAR STABILISATION SURGERY****Mustafa Al-Zubaidy**¹, Kira Faircloth², Oday Al-Dadah^{1,2}¹Translational and Clinical Research Institute, Faculty of Medical Sciences, Newcastle University, Framlington Place, NE2 4HH, Newcastle-upon-Tyne, United Kingdom. ²Department of Trauma and Orthopaedic Surgery, South Tyneside District Hospital, Harton Lane, South Shields, NE34 0PL, South Shields, United Kingdom**POSTER 2****POPULATION-BASED PREVALENCE OF FEMOROACETABULAR IMPINGEMENT: A SYSTEMATIC REVIEW AND META-ANALYSIS****Ignatius Liew**¹, Wen Xian Low², Mary Fortune³, Vikas Khanduja¹¹Cambridge University Hospital, Cambridge, United Kingdom. ²East Suffolk and North Essex NHS Foundation Trust, Ipswich, United Kingdom.³University of Cambridge, Cambridge, United Kingdom**POSTER 3****OUTCOMES OF IMPLANT-MEDIATED GUIDED GROWTH FOR PAEDIATRIC ANTERIOR CRUCIATE LIGAMENT INJURY: A SYSTEMATIC REVIEW****Jessica Treves**^{1,2}, Kiyana Mirza³, Wen Xian Low⁴, Ignatius Liew²¹University of Cambridge, Cambridge, United Kingdom. ²Cambridge University Hospitals, Cambridge, United Kingdom. ³Norfolk & Norwich University Hospital, Norwich, United Kingdom. ⁴East Suffolk and North Essex NHS Foundation Trust, Ipswich, United Kingdom**POSTER 4****ONMRI – AI-POWERED OBJECTIVE MRI ANALYSIS FOR QUANTIFIABLE MUSCULOSKELETAL IMAGING****Paul Lee**, Tanvi Verma

MSK Doctors, Sleaford, United Kingdom

POSTER 5**INFORMING THE FUTURE OF EXTENDED REALITY (XR) HOLOGRAM VIEWING IN KNEE ARTHROSCOPY: A PILOT RANDOMISED CONTROLLED TRIAL COMPARING XR WITH TRADITIONAL SCREEN STACK SYSTEMS****Mohamed Youssef**, Alexandros Papadopoulos, Amit Chawla, Nayef Aslam-Pervez

Hull Royal Infirmary, Hull, United Kingdom

POSTER 6**NEGLECTED IATROGENIC PERONEAL TENDON DISLOCATION MANAGED WITH FIBULAR GROOVE DEEPENING AND SPR RECONSTRUCTION: A CASE REPORT****Pon Aravindhnan Sugumar**

Apollo Main Hospitals, Chennai, India

POSTER 7**IMPACT OF CONCURRENT MENISCUS TEARS AND ARTICULAR CARTILAGE LESIONS ON THE CLINICAL OUTCOME OF ANTERIOR CRUCIATE LIGAMENT RECONSTRUCTION****Mustafa Al-Zubaidy**¹, Michelle Rogger², Oday Al-Dadah^{1,2}¹Translational and Clinical Research Institute, Faculty of Medical Sciences, Newcastle University, Framlington Place, NE2 4HH, Newcastle-upon-Tyne, United Kingdom. ²Department of Trauma and Orthopaedic Surgery, South Tyneside District Hospital, Harton Lane, South Shields, NE34 0PL, South Shields, United Kingdom**POSTER 8****CLINICAL OUTCOME FOLLOWING PATELLAR STABILISATION SURGERY AND ITS CORRELATION WITH RADIOLOGICAL PARAMETERS****Mustafa Al-Zubaidy**¹, Kira Faircloth², Oday Al-Dadah^{1,2}¹Translational and Clinical Research Institute, Faculty of Medical Sciences, Newcastle University, Framlington Place, NE2 4HH, Newcastle-upon-Tyne, United Kingdom. ²Department of Trauma and Orthopaedic Surgery, South Tyneside District Hospital, Harton Lane, South Shields, NE34 0PL, South Shields, United Kingdom**POSTER 9****IMPACT OF GRAFT CHOICE ON SHORT-TERM PATIENT OUTCOMES FOLLOWING ANTERIOR CRUCIATE LIGAMENT RECONSTRUCTION****Mustafa Al-Zubaidy**¹, Michelle Rogger², Oday Al-Dadah^{1,2}¹Translational and Clinical Research Institute, Faculty of Medical Sciences, Newcastle University, Framlington Place, NE2 4HH, Newcastle-upon-Tyne, United Kingdom. ²Department of Trauma and Orthopaedic Surgery, South Tyneside District Hospital, Harton Lane, NE34 0PL, South Shields, United Kingdom**POSTER 10****FOUNDATIONS OF A CORE OUTCOME SET IN PAEDIATRIC ACL SURGERY: SIMILAR DOMAINS AND PROMS ARE USED ACROSS INCOME SETTINGS.**Neel Badhe¹, Matthew Dowsett², **Christopher Busby**³, Wen Xian Low², Adeel Ikram³, Stephen McDonnell², Ignatius Liew², Ben Marson^{4,5}¹Department of Orthopaedics and Trauma, Academic Unit of Injury, Recovery and Inflammation Sciences, Nottingham, United Kingdom.²Department of Trauma and Orthopaedics, Addenbrooke's Hospital, University of Cambridge, Cambridge, United Kingdom. ³Orthopaedic and Accident Surgery, Musculoskeletal, Surgery, Inflammation and Recovery Theme NIHR Biomedical Research Centre University of Nottingham, Nottingham, United Kingdom. ⁴Department of Orthopaedics and Trauma, Academic Unit of Injury, Recovery and Inflammation Sciences, Nottingham, United Kingdom. ⁵Musculoskeletal, Surgery, Inflammation and Recovery Theme NIHR Biomedical Research Centre University of Nottingham, Nottingham, United Kingdom

POSTERS DISPLAY**POSTER 11****UNDER-RECOGNISED MEDIAL INJURIES IN ANTERIOR CRUCIATE LIGAMENT RUPTURE: A TWELVE-YEAR BLINDED MRI COMPARISON SHOWS IMPROVED DETECTION BUT PERSISTENT UNDER-REPORTING OF DEEP MCL, RAMP LESIONS AND MENISCAL ROOT TEARS.**

Borna Guevel¹, Lewis Turner, Wern Yi Ooi, Omar Odeh, Andreas Ladas, Syed Babar, Rhidian Thomas
Imperial College Healthcare NHS Trust, London, United Kingdom

POSTER 12**MEASUREMENT OUTCOMES AND VALIDITY EVIDENCE OF LOW-FIDELITY KNEE ARTHROSCOPY SIMULATORS: A SYSTEMATIC REVIEW**

Mayek Gupta¹, Moksh Sharma^{2,3}, Shameel Suhail⁴, Akash Patel^{5,1}

¹UCL Medical School, London, United Kingdom. ²Nottingham University Hospitals NHS Trust, Nottingham, United Kingdom. ³School of Medicine, University of Nottingham, Nottingham, United Kingdom. ⁴King's College Hospital NHS Foundation Trust, London, United Kingdom. ⁵Royal Free London NHS Foundation Trust, London, United Kingdom

POSTER 13**BILATERAL LATERAL DISCOID MENISCUS PRESENTING WITH SIMULTANEOUS BILATERAL MEDIAL OSTEOCHONDritis DISSEANS: A CASE REPORT**

Mayek Gupta¹, Hannah Eskender¹, Shameel Suhail², Olivia Malaga-Shaw², Akash Patel^{2,1}

¹UCL Medical School, London, United Kingdom. ²Royal Free London NHS Foundation Trust, London, United Kingdom

POSTER 14**MANAGEMENT OF MALUNITED PATELLAR FRACTURE WITH OPEN REDUCTION AND INTERNAL FIXATION: A CASE REPORT**

Adam Henderson, Piyush Setia

Tameside & Glossop Integrated Foundation Trust, Manchester, United Kingdom

POSTER 15**SUPPORTING THE SURGEON: ERGONOMIC RISK, MUSCULOSKELETAL SYMPTOMS, AND THE CASE FOR SYSTEMIC CHANGE**

Lauren Keitley¹, Isobel Press², Suzannah Hoult³

¹Gloucestershire Hospitals NHS Foundation Trust, Cheltenham, United Kingdom. ²Worcestershire Acute Hospitals NHS Trust, Worcester, United Kingdom. ³North Bristol Trust, Bristol, United Kingdom

POSTER 16**OUTCOMES REPORTED IN TRIALS OF CHILDREN AND ADOLESCENT KNEE INJURIES: A SYSTEMATIC REVIEW**

Ignatius Liew¹, Wen Xian Low², Adeel Ikram³, Stephen McDonnell¹, Ben Marson³

¹Cambridge University Hospital, Cambridge, United Kingdom. ²East Suffolk and North Essex NHS Foundation Trust, Ipswich, United Kingdom. ³Musculoskeletal, Surgery, Inflammation and Recovery Theme NIHR Biomedical Research Centre University of Nottingham, Queens Medical Centre, Nottingham, United Kingdom

POSTER 17**TRAINEE INVOLVEMENT IN HIP FRACTURE SURGERY DOES NOT COMPROMISE BLOOD LOSS: RESULTS OF A SINGLE-CENTRE STUDY**

Omar Mostafa¹, Mamyunah Malik², Ratul Quddus², Maneesh Sinha²

¹Birmingham Orthopaedic Training Programme, Birmingham, United Kingdom. ²Dudley Group NHS Foundation Trust, Dudley, United Kingdom

POSTER 18**DOES SITE OF SKIN INCISION AFFECT PATIENT-REPORTED OUTCOMES IN TOTAL KNEE ARTHROPLASTY? A META-ANALYSIS OF COMPARATIVE STUDIES**

Omar Mostafa¹, Eden Mostafa², Tahir Khaleeq¹, Osama Aweid³, Loiy Alkhatib⁴, Amit Meena⁵, Bolarinwa Akinola⁶, Usman Ahmed⁷, Shahbaz Malik⁷

¹Birmingham Orthopaedic Training Programme, Birmingham, United Kingdom. ²University of Birmingham, Birmingham, United Kingdom. ³Fortius Clinic, London, United Kingdom. ⁴Dr. Suleiman AlHabib Hospital, Dubai, UAE. ⁵Shalby Multi-Specialty Hospital, Rajasthan, India. ⁶Osteon Clinics, Lagos, Nigeria. ⁷Worcestershire Acute Hospitals NHS Trust, Worcester, United Kingdom

POSTER 19**DIAGNOSTIC ACCURACY OF MRI FOR ASSOCIATED INJURIES IN PAEDIATRIC PATIENTS WITH ACL TEARS**

Isaac Okereke¹, Sadeeq Azeez², Sheba Basheer³

¹The Royal Wolverhampton NHS Trust, Wolverhampton, United Kingdom. ²The Royal Orthopaedic Hospital, Birmingham, United Kingdom. ³Birmingham Children's Hospital, Birmingham, United Kingdom

POSTER 20**NOVEL TECHNIQUE TO AID IN THE PASSAGE OF GRAFT AND SCREW AFTER DRILL TUNNEL PLACEMENT.**

Davendra Roopnarine Singh

Chesterfield Royal Hospital, Chesterfield, United Kingdom

POSTERS DISPLAY

POSTER 21

OUTCOMES OF AN ISOLATED LATERAL EXTRA-ARTICULAR PROCEDURE FOR POST-ACLR ROTATORY INSTABILITY: A SYSTEMATIC REVIEW**Anirudh Sharma**¹, Peter Davies², Darren de SA³, Amit Meena⁴, Peter D'Alessandro⁵, Shahbaz Malik⁶¹Birmingham Orthopaedic Training Programme, Birmingham, United Kingdom. ²The Robert Jones and Agnes Hunt Orthopaedic Hospital, Oswestry, United Kingdom. ³McMaster University, Ontario, Canada. ⁴Shalby Multispecialty Hospital, Jaipur, India. ⁵University of Western Australia, Perth, Australia. ⁶Worcestershire Acute Hospitals NHS Trust, Worcester, United Kingdom

POSTER 22

DOES AUTOGRAFT TYPE AND PATIENT CHARACTERISTICS HAVE A CORRELATION WITH ACL GRAFT THICKNESS? : A RETROSPECTIVE ANALYSIS.**Aliya Siddiqui**¹, Joyal Shenny², Yasser Anathallee², Asim Siddiqui², Osman Riaz²¹University of Leeds, Leeds, United Kingdom. ²Calderdale Huddersfield NHS foundation trust, Huddersfield, United Kingdom

POSTER 23

CLOSED PROXIMAL FRACTURE DISLOCATION HUMERAL HEAD WITH NEUROVASCULAR COMPROMISE: A CASE REPORT.**Chloe Sowerby**, Piyush Setia

Tameside and Glossop Integrated Care NHS Foundation Trust, Manchester, United Kingdom

POSTER 24

MANAGEMENT OF ACJ DISLOCATIONS WITH DISTAL CLAVICULAR FRACTURES IN PAEDIATRIC PATIENTS: A SYSTEMATIC REVIEW**Hamza Tareen**¹, Omar Mustafa², Robert Jordan³, Shahbaz Malik^{4,5}¹King's College London, London, United Kingdom. ²Birmingham Orthopaedic Training Programme, Birmingham, United Kingdom. ³University Hospitals Birmingham, Birmingham, United Kingdom. ⁴Worcestershire Acute Hospitals NHS Trust, Worcester, United Kingdom. ⁵Birmingham Knee School, Birmingham, United Kingdom

POSTER 25

AI-DRIVEN BIOMECHANICAL FRAMEWORK FOR QUANTITATIVE MOTION PROFILING IN SPORTS MEDICINE WITH MAI MOTION**Paul Lee**, Tanvi Verma

MSK Doctors, Sleaford, United Kingdom

POSTER 26

EVALUATING EMERGING INJECTABLE THERAPIES IN KNEE OSTEOARTHRITIS WITH ARTHROSAMID**Paul Lee**, Tanvi Verma

MSK Doctors, Sleaford, United Kingdom

POSTER 27

REHABILITATION PROTOCOLS FOR CHILD AND ADOLESCENT KNEE INJURIES: A SYSTEMATIC REVIEWRaagawin Srikantharuban¹, **Vinay Krishna Pillai Vijayamohan**¹, Aswin Srikantharuban², Wen Xian Low³, Mohammed Jawad¹, Faye Grace⁴, Hannah Boddy⁴, Stephen McDonnell⁴, Ignatius Liew⁴¹Norwich Medical School, University of East Anglia, Norwich, United Kingdom. ²Imperial College School of Medicine, London, United Kingdom. ³Queen Mary, University of London, London, United Kingdom. ⁴Department of Trauma and Orthopaedics, University of Cambridge, Cambridge, United Kingdom

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