Royal London Hospital Orthopaedic Trauma Society

Academic Meeting 2022



24th June 2022

The Barbican Centre

Royal London Hospital Orthopaedic Trauma Society 2022 – Agenda

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Presidential Address

After a two-year hiatus caused by the Covid-19 pandemic it is a pleasure to welcome everyone back to a face-to-face meeting. Nothing beats direct conversation. We last convened on 28th June 2019 for our 12th RLHOTS meeting. Circumstances conspired to lead us to abort the subsequent annual meetings at an advanced stage of planning. Today we can celebrate our 13th gathering.

We are privileged to welcome leaders of our profession and thank them all for devoting their limited time to our meeting and sharing their thoughts. We have rightly convinced the President of the BOA that RLHOTS outranks EFORT in importance.

As always, we owe thanks to our committee. They have worked hard to arrange our programme and secure the finances, which enable this meeting to be offered without a subscription. We do therefore ask a small favour. Would delegates visit our sponsors and during the intervals and engage them in discussion?

I wish to acknowledge our trainees who have been inspirational in the last two years. It has been a very difficult period with training opportunities frequently restricted and at some stages non-existent. Many took on roles and responsibilities which were completely outside their areas of experience and did so with determination and great skill. Thank you all. During the same time, a funded academic Chair has finally been granted, and we look forward to Professor Griffin leading us to capitalise on the wealth of clinical material that a MTC provides.

The standard of abstracts received for consideration this year was high. We are grateful for you offering your work for consideration. Judging what should be afforded a podium presentation was not easy. For those who were not given the opportunity today please forgive us, as time was the enemy.

On a personal note, I recall first chairing this meeting on 21st June 2013 (6th RLHOTS) taking over from Tom Bucknill who had retired the previous year. I have now embarked on the Retire & Return route and feel it is time to offer my resignation as Chairman. I would like to thank the Society for the privilege of serving it and wish it success in its future endeavours.

Gareth Scott

TPD Address

It is with great pleasure that I finally welcome you to the 13th RLHOTS Annual Academic Meeting, following the cancellation of our two previous meetings due to the Covid-19 pandemic. It will be wonderful to see everyone in person and to catch up with friends and colleagues in a relaxed and pleasing setting.

Today's venue, the Barbican Centre, is the largest performing arts centre in Europe. It hosts music concerts, theatre performances, film screenings and art exhibitions. It houses a library, three restaurants and a conservatory. The London Symphony Orchestra and the BBC Symphony Orchestra are both based in the centre's Concert Hall, but today Trauma & Orthopaedics takes centre-stage!

The past two years have been tough for so many reasons and I am incredibly appreciative of all our colleagues across the rotation who have endeavoured to continue providing high-quality training despite the many challenges.

I would like to take this opportunity to thank all the fantastic and committed trainers at Barts and throughout the region who continue to make this the greatest training programme in the country! It is down to all your time, dedication and skill that we continue to rank so high at National Selection and attract the highest calibre of trainees.

There have been some changes to training over the past 2 years, most notably the introduction of the new T&O curriculum and the MCR, the Multiple Consultant Report. The MCR is an assessment for trainee feedback and learning that is based on the professional judgements of the consultants they work with. The assessment is designed to assess their level of performance against the benchmark of a "day one" consultant. It aims to ensure trainees are on track with their training and that any difficulties can be addressed in good time. There have certainly been some teething problems in introducing this, but I have already seen positive benefits at our recent ARCPs. Please stick with it and do strive to set aside time for your departments to all fully participate in this as I am confident that this will prove a valuable tool for formative and summative assessment.

I am grateful to you all for taking time away from your busy practices to come and support the meeting and I look forward to catching up with old friends, as well as making new relationships. I anticipate a stimulating day and a fantastic dinner tonight.

In this regard, I would like to express our sincere gratitude to our distinguished faculty and speakers today as we look forward to a day of engaging and educational talks.

Finally, I would like to thank the organising committee for their work in putting together a stimulating programme for what should prove to be an excellent day (and evening!)

I hope that you continue to support the Royal London Rotation so that we can continue providing the highest quality training and education in Trauma & Orthopaedics.

Kash Akhtar

RLHOTS Committee 2021-2022



Ajay Asokan ST3 Communications



Nicholas Birkett ST5 Social



Benjamin Gabbott ST4 Academic



Raashad Hasan ST3 Webmaster



Anthony Kinnair ST5 Student Mentoring



Wahidun Nabi ST8 BOTA Rep



Deovrat Parmar ST4 Treasurer

Founding Members



Mr Nicholas Wardle

Mr Wei Yoon



The Royal College of Surgeons of England has awarded up to 5.25 CPD points for this event.

A certificate of completion will be emailed to you on completion of feedback



Timetable

| Time | Author | Title |
|-------------|-----------------------------------|---|
| 0800 – 0900 | Registration | Coffee + Breakfast |
| 0900 – 0910 | Prof Scott | Welcome |
| 0910 – 0950 | Prof Skinner | Frontiers in Orthopaedics |
| 0950 – 1030 | Mr McClelland | Private Practice: The Past and The Future |
| 1030 – 1100 | Break | |
| 1100 – 1130 | Registrars + SHO's | Research Presentations Session 1 |
| 1130 – 1200 | Prof Weiser | Surviving to Discharge: Failure to Rescue and the Current Challenge for Global Surgical Care |
| 1200 – 1215 | Dr Lorenzo Masci | Ultrasound-Guided Joint Injection in Non-Operative Osteoarthritis Management – What To Expect? |
| 1215 – 1330 | Lunch + Posters | |
| 1230 – 1245 | | Royal London Rotation Trainees Photograph |
| 1330 – 1410 | Ms Waters | Orthoplastic Surgery In War & Peace |
| 1410 – 1420 | Mr Ak <mark>htar + Mr Nabi</mark> | Training Awards |
| 1420 – 1430 | Ms Kate Atkinson | Diversity Update |
| 1430 – 1500 | Registrars + SHO's | Research Presentations Session 2 |
| 1500 – 1515 | Prof Scott | Unmasking Contemporary Research Fraud |
| 1515 – 1545 | Break | |
| 1545 – 1615 | Dr Gossage | Finding The Right Ladder and Facing Up To Failure |
| 1615 – 1645 | Achilleas Kallakis | The Science of Poker |
| 1645 – 1700 | Mr Akhtar | Closing Comments |



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Speakers

Professor John Skinner



Professor of Orthopaedic Surgery, Royal National Orthopaedic Hospital President of the British Orthopaedic Association

Mr Damian McClelland



Consultant Shoulder & Elbow Surgeon, Royal Stoke University Hospital Past National Clinical Director for BUPA



Professor Thomas Weiser

General Trauma Surgeon & Surgical Intensivist, Stanford University Medical Centre Clinical Associate Professor, Stanford University Consulting Medical Officer for Lifebox

Ms Ruth Waters



Consultant Plastic Surgeon, Queen Elizabeth Hospital Birmingham President of the British Association of Plastic Reconstructive and Aesthetic Surgeons

HIL A ME ALIEN

Dr Lucy Gossage



Consultant Oncologist, Nottingham University Hospitals 14 times Iron-distance Champion Co-Founder of 5K Your Way, Move Against Cancer

Achilleas Kallakis

Professional Poker Player

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| Registrar Research Timetable | | | |
|------------------------------|-----------------------------|---|--|
| Time | Presenter | Title | |
| Session 1 | | | |
| 1100 – 1110 | S. Shah | Current practice of intra-operative sampling during revision surgery of the knee for prosthetic joint infection at a high-volume district general hospital | |
| 1110 – 1120 | A. Pradhan | Compliance with the BOAST Safe Use of Intraoperative Tourniquets Guidance: A Trauma and Elective Orthopaedic Unit Experience | |
| 1120 – 1130 | A. Bajracharya | Surgical Delay in Neck of Femur Fracture Patients Taking Direct Oral Anticoagulants – A Retrospective Study | |
| Session 2 | | | |
| 1430 – 1440 | J. Bacarese- Hamilton | Epidemiological features of calcaneo-cuboid joint injuries. Is this a benign injury? | |
| 1440 – 1450 | S. Madanipour | Subsidence In Centraliser (SINC) Sign - A novel tool to help predict early subsidence in periprostheticfemoral fractures around polished tapered stems treated with internal fixation. | |
| 1450 – 1500 | W. Nabi | Cohort analysis of implants used and complication rates of total hip arthroplasty in patients with Ehlers- Danlos syndrome | |

Registrar Research - Abstracts

Current practice of intra-operative sampling during revision surgery of the knee for prosthetic joint infection at a high-volume district general hospital

Savan Shah¹, Arjan Singh Sehmbi^{1,2}, Asad Ali²

¹Department of Orthopaedics, Barking, Havering and Redbridge University Hospitals Trust, Queen's Hospital, Romford

²Bart's and the London School of Medicine and Dentistry, Queen Mary University of London, Garrod Building, Whitechapel, London

Background:

Successful treatment of prosthetic joint infection (PJI) involves surgical interventions and identification of infecting organisms to enable targeted antimicrobial therapy. Current PHE guidelines recommend 3 to 5 intra-operative samples to be taken using separate instruments for each, swabs are discouraged. We audited the revision arthroplasty practice at our peripheral District General Hospital, specifically comparing intra-operative sampling for infected revision knee procedures with these guidelines.

Methods:

Retrospective cohort study of all prosthetic knee infection cases, as defined by the Musculoskeletal Infection Society criteria, at our DGH between December 2011 to May 2020. A manual case note review collected demographic, surgical and microbiological data. There was specific focus on intraoperative sampling; type, number and technique. Point biserial correlation analysis was performed to determine statistical significance.

Results:

One hundred and nineteen revision knee arthroplasty procedures were performed in the 8.5 year study period. Of these 31 (26%) were for prosthetic joint infection (n=29 patients), n=2 patients had re-revision procedures for second PJI. The total number of samples taken ranged from 1 to 12 with a mode of 6. N=27 (87%) cases had the recommended number of total samples (≥3) taken, of these n= 20 (65%) had five or more samples taken. Following exclusion of swab samples n=24 (77%) cases had three or more samples taken and n=18 (58%) had five or more samples. There was no significant correlation between number of tissue samples and positive culture results, r_{pb} =-0.100 (p=0.592).

Conclusion:

Current management of infected knee arthroplasty presents great variability in intraoperative sampling technique. Sample collection adheres to national guidelines in 77% of cases. We suggest implementation of a standardised approach to sampling by inclusion of a five scalpel and five forceps pack specifically for sampling in theatre for all suspected prosthetic joint infections. Compliance with the BOAST Safe Use of Intraoperative Tourniquets Guidance: A Trauma and Elective Orthopaedic Unit Experience

Akhilesh Pradhan, Anil Haldar, Pinak Ray, Padmanabhan Subramanian

Barnet and Chase Farm Hospitals, Royal Free London NHS Foundation Trust

Background:

A tourniquet burn is a preventable iatrogenic injury. All tourniquet users should be aware of strategies for prevention, diagnosis and management of such injuries.

We assessed compliance with the BOA 'Safe Use of Intraoperative Tourniquets' standards at a trauma unit and elective orthopaedic centre within a single NHS trust.

Methods:

Retrospective data was collected using electronic patient records for trauma and elective patients who had surgery at two sites in the same NHS Foundation Trust during a one-month period.

Results:

50 patients were identified during the study period. Lower limb cases accounted for 56% of the trauma workload and 88% of elective cases. Senior trainees (ST7/8 grades) completed 52% of trauma cases whereas Consultants were the primary surgeon in 68% of elective surgeries. The same spread was reflected when we identified the author of the operation note.

Condition of the tourniquet prior to or at the end of the procedure was not documented in any elective or trauma case. Method of tourniquet isolation was documented in 16% (4/25) of trauma cases and no elective cases. Tourniquet pressure was documented in 64% (16/25) of trauma cases and 68% (17/25) of elective cases. Only 20% (10/50) of cases in both settings had pressures in keeping with BOA standards.

Tourniquet time was documented in 92% (23/25) of trauma cases and 84% (21/25) of elective cases. 8% (4/50) of cases exceeded a tourniquet time of 120 minutes. There were no postoperative tourniquet burns identified in either group.

Conclusion:

Documentation of intraoperative tourniquet use at our trust should be improved to comply with BOAST guidelines. Incorporating a tourniquet checklist into the WHO check with a template for documentation could help to improve documentation. Further studies will analyse the effect of such changes at our trust.

Surgical Delay in Neck of Femur Fracture Patients Taking Direct Oral Anticoagulants – A Retrospective Study

A Bajracharya, S Mansukhani, P Esguerra, D Kosuge

Princess Alexandra Hospital, Harlow

Background:

Timing of surgery is crucial in management of neck of femur (NOF) fractures as delayed surgery is associated with increase in complications and mortality. The Best Practice Tariff, introduced in 2010, set national standards for surgery to be performed within 36 hours for NOF fractures. At our trust, a new protocol was introduced in July 2019 for NOF fractures taking Direct Oral Anticoagulants (DOACs). The aim of our study was to ascertain whether the introduction of this protocol improved the timing of surgery, length of stay and post-operative complications in these patients.

Methods:

Retrospective data was collected between January 2018 to October 2021. Primary outcome was timing of surgery and secondary outcomes included length of stay and post-operative complications including wound and chest infections, blood clots, bedsores and mortality. Delayed surgery was defined as >36 hours from admission and patients were divided into 4 groups – pre-protocol early and delayed and post-protocol early and delayed.

Results:

Of 1492 patients, 135 patients were taking DOACs. 79.17% patients met the 36-hour standard compared to 63.49% pre-protocol. The average length of stay reduced from 22 days to 16.5 days post-protocol. In the delayed groups, mortality was the highest in both pre- and post-protocol (32.50% and 40.00% respectively). Wound complications and chest infections were the lowest in the post-protocol early group (17.54% and 26.32% respectively). There were 5 patients who had a washout; 3 were in the delayed pre-protocol group. The complications noted in the post-protocol group were compounded by the COVID-19 Pandemic.

Conclusion:

The introduction of a standardised protocol reduced the number of patients having delayed surgery and the length of stay. This study shows that post-operative complications can be reduced with early surgery in NOF fracture patients taking DOACs and this can be achieved with the introduction of a standardised protocol.

Epidemiological features of calcaneo-cuboid joint injuries. Is this a benign injury?

Joseph Bacarese-Hamilton, Ernesto De La Cruz Valdes, James Dalrymple, Alistair Chambers, Efthymios Iliopoulos

University College London Hospitals NHS foundation Trust, London, United Kingdom

Background:

We frequently come across injuries of the calcaneo-cuboid joint that can potentially be part of broader injuries of the Chopart complex. Our aim was to assess the incidence, mechanism, diagnosis, management and outcomes of injuries to the calcaneo-cuboid joint at a level 2 trauma centre.

Methods:

Data from all reported injuries of the calcaneo-cuboid joint at a level 2 Trauma Centre between January 2019 and January 2021 were collected. Clinical and radiological records were evaluated and the patients divided into groups according to the pattern of injury.

Results:

62 consecutive patients were included in the study. The mechanism of injury was mainly an inversion injury of the foot (73%), followed by a fall (13%). The most common injury was an avulsion of the dorsal calcaneo-cuboid ligament (66%), evident by an avulsion from the calcaneus or the cuboid. Isolated avulsion of the bifurcate ligament was rarer, accounting for 5% of cases; 15% had more complex injuries combining both the dorsal calcaneo-cuboid and bifurcate ligaments; 6% had an eversion midfoot injury evident by an impaction fracture of the calcaneus or cuboid.

Almost all patients were treated conservatively using a walking boot and weight bearing as tolerated; three patients were kept non-weight bearing for six weeks; only one patient was treated operatively; 56% were referred to physiotherapy. Four patients had significant pain at three months after their injury and only two had pain for more than six months, with no correlation with either the mechanism of injury (p=0.7 and 0.92), or which ligaments were involved (p=0.6 and 0.16).

Conclusion:

Low energy avulsion type injuries were the most common pattern of injury, sustained by an inversion midfoot injury. The majority of these patients can be managed nonoperatively with protected weight bearing and physiotherapy, with a low morbidity at 6 months.

Subsidence In Centraliser (SINC) Sign - A novel tool to help predict early subsidence in periprosthetic femoral fractures around polished tapered stems treated with internal fixation.

Suroosh Madanipour¹, Prashant Singh¹, Arpit Patel¹, Ruqayyah Beg^{1,2}, Menazir Sha^{1,2}, Ishvinder S Grewal³, Farhad Iranpour¹, Padmanabhan Subramanian¹

1. Royal Free London NHS Foundation Trust, Department of Trauma and Orthopaedic Surgery, Barnet Hospital, Wellhouse Lane, London EN5 3DJ, United Kingdom

2. University College London Medical School, 74 Huntley Street, Bloomsbury, London WC1E 6DE, United Kingdom

3. UT Southwestern Medical Center, Department of Orthopaedic Surgery, 523 Harry Hines Blvd, Dallas TX, USA

Aims

When treating periprosthetic femoral fractures (PFF) around polished taper slip stems (PTS), determining which patients can be successfully treated with internal fixation can be challenging. We have described the Subsidence-In-Centraliser (SINC) sign as a radiographic feature of PFF around PTS stems. We hypothesise that a positive SINC sign can predict poorer outcome for fixation of these fractures.

Patients and Methods

Retrospective identification of PPFs around cemented PTS with an appreciable centraliser on radiographs was conducted at a single centre. A positive SINC sign was defined as a post-injury radiograph demonstrating > 50% reduction in the radiographic lucency representing the stem centraliser when compared to pre-injury films, or complete obliteration of distal lucency when no pre-injury film was available. The primary outcome was the rate of subsequent stem subsidence on follow-up radiographs comparing SINC positive and SINC negative fractures which were managed with ORIF.

Results

54 patients were included in the analysis. Mean age was 76.8 years and mean followup for all patients was 12.7 months. 35 fractures were deemed to be SINC positive, and 19 SINC negative.

17/17 (100%) SINC positive fractures managed with fixation underwent further subsidence (mean 5.4mm, SD 2.8). A positive SINC sign demonstrated a sensitivity of 90.5% and specificity of 100% for subsequent stem subsidence in fractures treated without revision. SINC positive fractures underwent significantly more subsidence compared with SINC negative fractures when fixed (5.4mm vs 0.28mm, U = 6.50, p<0.001) at mean follow up of 12.7months. The SINC sign demonstrated strong inter (k=0.96) and intra-rater (k=0.86) reliability.

Conclusions

The SINC sign can serve as a useful adjunct in the decision to fix or revise PPF around PTS. A positive SINC sign may represent a cement mantle which cannot be reconstituted anatomically, leading to subsidence after treatment with ORIF.

Cohort analysis of implants used and complication rates of total hip arthroplasty in patients with Ehlers-Danlos syndrome

Wahidun Nabi, Suroosh Madanipour, Chinyelu Menakaya, Iftikhar Ahmed, Chukwudubem Anibueze, Alex Shearman, Richard Carrington, James Donaldson, Chethan Jayadev, Jonathan Miles, Helen Cohen, Robert McCulloch, Alister Hart, John Skinner

Royal National Orthopaedic Hospital NHS Foundation Trust

Background:

Ehlers-Danlos syndromes (EDS) are a collection of inherited connective tissue conditions characterised by clinical features of joint hypermobility, ligament and skin laxity and pain (1). Periprosthetic joint dislocation is a concern in this patient group, but there is little published literature on THA in EDS to guide surgical strategy.

Aim:

Firstly to evaluate the types of implants used in patients undergoing THA with a background of EDS. Secondly to assess complication rates and revision rates in this group, including periprosthetic dislocation.

Methods:

A Cohort study in patients with a coded diagnosis of EDS between the dates of January 2010 and April 2022. Records of every EDS patients were reviewed to identify those that have undergone an elective THA procedure. Data for subsequent THA dislocations, revision surgery and implants used were collected.

Results:

76 patients were identified as having a diagnosis of EDS from January 2010 to April 2022. 15 EDS patients had THA with a total of 22 primary THAs performed. 1 THA (4.5%) utilised a dual mobility cup and 1 THA (4.5%) used a custom THA implants. There were no recorded lipped liners or other constraint device were used. There were no dislocation episodes and no revision for instability. 3 patients (13.6%) had revision of their THA for pain and aseptic loosening.

Conclusion:

Dislocation rates in patients undergoing THA with a diagnosis of EDS do not appear to be higher than the general population. Revision rates within this group were higher than expected but consistent with previously published literature on this topic. The authors would recommend that patients with EDS undergoing THA do not have an absolute requirement for a highly constrained implant.

Trainer of the Year 2020-2021 & 2021-2022 Nominees



Mr Nicholas Aresti Shoulder & Elbow Surgeon Barts Health NHS Trust

Mr Toby Baring Shoulder & Elbow Surgeon Homerton University NHS FT





Mr Rej Bhumbra Hip & Knee Surgeon Barts Health NHS Trust



Mr Syed Hassan Hip & Knee Surgeon Barking, Havering and Redbridge NHSFT

Mr Arif Gul Spine Surgeon Princess Alexandra Hospital NHSFT





Mr Lucky Jeyaseelan Foot & Ankle Surgeon Barts Health NHS Trust



Mr Arif Khan Spine Surgeon Barts Health NHS Trust

Mr Satish Kutty Hip & Knee Surgeon Princess Alexandra Hospital NHSFT





Ms Claudia Mazien Paediatric Orthopaedic Surgeon Barts Health NHS Trust



Mr Pinak Ray Foot & Ankle Surgeon Royal Free NHSFT

Mr Dimitrios Tsekes Shoulder & Elbow Surgeon Mid and South Essex NHSFT



Kostas Tsitskaris Hip & Knee Surgeon Barts Health NHS Trust



Mr Alexandros Virs Limb Reconstruction Surgeon Barts Health NHS Trust

Previous Trainer of the Year Winners

2020 Mr Jeh Mahaluxmivala 2019 Mr Adrian Carlos 2018 Mr Livio Di Mascio 2017 Mr Matthew Barry HILA ME ALIENUM P 2016 Mr Jeh Mahaluxmivala 2015 Ms Swee Ang

2014 Mr Mark Loeffler

2013 Mr Peter Bates

2012 Professor Gareth Scott

2011 Mr Thomas Bucknill

After Conference Dinner

in the



Venue – Courthouse Hotel Soho,

19-21 Great Marlborough Street, London W1F 7HL

Dress code – Smart Casual

Time – 1930

Royal London Hospital Orthopaedic Trauma Society

Academic Meeting 2022



24th June 2022

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