FOOT & ANKLE
SCOTLAND

# Foot and Ankle Scotland 2026

## Stirling Court Hotel

## Friday 4th September 2026

Dear Delegate

It is my great pleasure to welcome you to FASt 2026, at Stirling Court Hotel in the grounds of The University of Stirling. We have returned to the same venue as the past few years, as it suits our needs perfectly, and gives plenty of room to accommodate our sponsors, without whom, the meeting would not run. Please take the opportunity to visit their stands in the breakout area during coffee and lunch intervals.

We are very lucky to welcome the current President of the British Orthopaedic Foot and Ankle Society, and Vice President Elect of the British Orthopaedic Association, Mr Hiro Tanaka. It is also a great honour to have Mr Senthil Kumar, one of the founders of FASt, speak in this his retirement year.

We have responded to feedback made in previous years. This year we have shorter talks and more speakers. It is also my hope that the talks are not seen as a definitive guide to the topic, but should stimulate discussion on the floor and we hope that as many of you as possible will share your views and experiences. For this reason we have chosen topics that the whole audience will have significant experience in managing, which happen to be topics that have not been discussed for many years at FASt.

I do hope that you enjoy the meeting and find the programme both educational and enjoyable.

Best Wishes

Sam Roberts

Foot and Ankle Scotland Chair

# 17th Annual FAST Meeting Programme

# Stirling Court Hotel – Friday 4th September 2026

## Blair Atholl Suite

Coffee / Registration – 8:45 - 9:15

## Introduction: Welcome to FASt

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| 9:15 – 9:30 | Mr Sam Roberts – FASt Chair |

## Session 1 The Degenerative 1st MTPJ

### Chair: Louise Fisher

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| 09:30 – 09:45 | Biomechanics – what surgeons don't know but should know (Non-operative management and the principles behind this |
| | Dr Ruth Barn |
| 09:45 – 10:00 | "I want to keep my range of movement" - Surgery for 1st MTPJ after the demise of arthroplasty |
| | Miss Jane Madeley |
| 10:00 – 10:15 | AHP Discussion – To splint or not |
| | Orthopaedic Discussion – Fuse or not fuse |

***Getting it Right 2nd Time Tips and Tricks?***

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| 10:15 – 10:25 | Failed MTPJ replacement |
| | Mr Neil Forrest |

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| 10:25 – 10:35 | Non-union |
| | Mr Shariff Hazarika |
| 10:35 – 10:45 | 1st MTPJ malunion |
| | Mr Nnamdi Obi |
| 10:45 - 11:00 | Discussion |

11:00 – 11:20 **Coffee Break and Industry Stands (Wallace Monument Room)**

## Session 2 BOFAS Presidential Lecture –

### Chair: Mr Robert Clayton

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| | Transcending the Rules |
| 11:20 – 11:50 | Mr Hiro Tanaka, President of The British Foot and Ankle Society |

## Session 3 Research Presentations

### Chair: Mr C Senthil Kumar

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| 11:50 - 11:55 | Morton's neuroma- is histopathological confirmation really necessary. |
| | Matthew Gilespie (To be present by Issy Ingram & Grace Wilkinson) |
| 11:55 – 12:00 | Injections Complications in the Foot and Ankle. |
| | Taylor McLaughlin |
| 12:00 – 12:05 | Service evaluation of exogen ultrasound therapy for non-unions at Forth-valley royal hospital: clinical, financial outcomes and recommendation for best practice. |
| | Mishkat Muaz Abdelrahim Mustafa |
| 12:05 - 12:15 | Questions and Discussion |

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| 12:15 – 12:20 | The Outcomes of Conservative and Surgical Management of Lisfranc Injuries Are Comparable: A Retrospective Cohort Study.<br><br>Jack Wilby (To be presented by Nasir Chohan) |
| 12:20 – 12:25 | The impact of preoperative coronal alignment on the outcome of total ankle replacements.<br><br>Jun Min Leow |
| 12:25 – 12:30 | Post-Operative Outcomes for Patients with Pes Cavus.<br><br>Anna Griffin |
| 12:30 – 12:40 | Questions and Discussion |

**12:40 – 13:30 Lunch and Industry Stands (Wallace Monument Room)**

## Session 4 Ankle Arthritis

### Chair: Mr S Senthilkumaran

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| 13.30- 13.45 | Biomechanics – what surgeons don't know but should know<br><br>Bruce Morris |
| 13.45- 14:00 | Patient Selection: Non-op vs Arthroplasty vs Fusion<br><br>Mr Oruaro Onibere |
| 14:00- 14.10 | Ankle Arthroplasty – how I do it. Tips and Tricks session.<br><br>Mr John McKinley |
| 14.10- 14.20 | Ankle Fusion – how I do it. Tips and Tricks session.<br><br>Mr Robert Carter |
| 14.20- 14.40 | Debate: Ankle Fusion vs Ankle Arthroplasty.<br><br>Mr John McKinley, Mr Robert Carter |

## Session 5 Complex cases

**Chair: Mr Perri Nunag**

14:40- 15:10

15:10 – 15:20 Coffee & Cake (Blair Atholl Suite)

**Session 6** **Reflections of a Career in Foot & Ankle Surgery – past, present and future.**

**Chair: Mr John McKinley.**

15:20- 15:50 Mr Senthil Kumar

**15:50 – 16:00** **Prizes and close**

**16:00 – 17:00** **AGM – All attendees are invited to stay and participate**

## Sponsors

Our Annual Meeting Would not be possible without the support of our sponsors

Please take the time to visit their stands during the meeting










# Free Paper Abstracts

## Morton’s neuroma- is histopathological confirmation really necessary?

Gillespie MJ, Ingram I, Wilkinson G, Thomson CE, McKinley JC

Trauma and Orthopaedics Dept, Royal Infirmary of Edinburgh

**Background:** Morton's neuroma (interdigital neuroma) is a common benign cause of forefoot pain. Although its exact aetiology remains unclear, patients typically present with characteristic signs and symptoms. Diagnosis can be confirmed with ultrasonography, and surgical excision is recommended when non-operative management has failed. The Royal College of Pathologists currently advocates routine histopathological analysis of all excised Morton's neuromas; this study examines whether such analysis is always warranted.

**Methods:** A single-centre retrospective analysis identified all patients who underwent surgical excision of Morton's neuroma over a six-year period. Patients in whom clinical, radiological, and intra-operative findings were concordant for Morton's neuroma were included for review.

**Results:** A total of 133 neuromas in 98 patients (2020–2026) met the inclusion criteria. In patients where clinical, radiological, and intra-operative features were consistent with Morton's neuroma, histopathological analysis confirmed the diagnosis in 131/133 (98%) of cases. In one patient, two excised specimens had benign pathological features but not diagnostic of Morton’s neuroma.

**Conclusion:** This single-centre study demonstrates that when clinical and radiological findings are in agreement, histopathological analysis is unnecessary to confirm a diagnosis of Morton's neuroma. We recommend that histopathological assessment be reserved for cases where diagnostic uncertainty exists.

# Injections Complications in the Foot and Ankle.

Taylor McLaughlin

**Introduction**: While some data exists regarding the nature of the adverse effects of intra-articular corticosteroid injection into the foot and ankle, there is little data which precisely identifies the frequency of these. The aim of this study was to determine the frequency of the complications associated with these injections and to assess for any risk factors.

**Methods**: Patients aged 18+ who received an intra-articular injection into the subtalar, talonavicular, or calcaneocuboid joint over a 4.5-year period between June 2021 and February 2026 at The Forth Valley Royal Hospital were included in the data. The patient cohort includes those who had undergone multiple injections. Independent variables included age, sex, location of injection, and laterality of injection. Outcomes were measured by reviewing patient notes from follow up appointments, which were conducted 3-6 months post-injection. Only reported symptoms from the first 3 months post-injection were considered a positive result for an adverse effect.

**Results**: Of the 111 patients in the final cohort, 3 patients (2.7% of cohort) each experienced a single adverse effect within 3 months post-injection. All 3 of these patients reported symptoms of post-injection steroid flare. No cases of infection, sub-cutaneous fat atrophy, or skin changes were noted. Risk factors for the development of complications could not be reliably determined due to the low number of adverse effects in this cohort.

**Discussion**: The rate of complications following intra-articular corticosteroid injection into the subtalar, talonavicular, and calcaneocuboid joints was found to be 2.7%. Post-injection steroid flare was the only adverse effect recorded in this cohort. These results are consistent with existing evidence and are supportive of foot and ankle injections being safe. No risk factors could be determined by analysing the 3 adverse effects in this cohort, therefore larger studies are required to identify predictive factors for the development of complications.

# Service evaluation of Exogen ultrasound therapy for non-unions at Forth-Valley Royal Hospital: clinical, financial outcomes and recommendation for best practice

Mishkat Muaz Abdelrahim Mustafa [1], Zaren Nacario [1]

Mr Biju Benjamin [2], Turab Syed [2], EFSTATHIOS DRAMPALOS [2]

University of Glasgow[1]

Forth Valley Royal hospital, NHS Forth Valley [2]

**Background**: Non-union is failure of fracture healing within the expected timeframe, associated with impaired osteogenesis, pain, and reduced function. Low-intensity pulsed ultrasound (EXOGEN) enhances bone healing via mechano-transduction, promoting osteoblastic activity and angiogenesis, with effectiveness dependent on fracture stability and adherence.

**Methods**: A retrospective service evaluation was conducted of patients treated with EXOGEN for non-union at Forth Valley Royal Hospital (2021–present). Data included demographics, fracture characteristics, and prior interventions. Primary outcome was radiological/clinical union; secondary outcome was Manchester–Oxford Foot Questionnaire (MOXFQ). Subgroups included foot and ankle fractures, femoral fractures, and fusion-related non-union. Compliance was assessed via documentation and device data.

**Results**: Twenty-eight patients were included (mean age 59 years), with an overall union rate of 75% (21/28). Foot and ankle fractures demonstrated the highest success: fibular fractures 100% union (5/5) with MOXFQ improvement from 69% to 48% ($p = 0.002$); metatarsal fractures 91.6% (11/12), increasing to 100% after excluding one surgical case, with MOXFQ improvement from 63% to 14% ($p < 0.0001$). Navicular fractures showed 100% union but worsened MOXFQ (52% to 66%). Femoral fractures (n = 5) had 60% union (3/5), with variation by fixation method. Fusion-related non-union (n = 4) had 25% union (1/4), with modest symptomatic improvement despite poor radiological outcomes.

Compliance documentation was initially 14% (4/28), increasing to 36% (10/28) after device interrogation; 60% of these showed >95% adherence.

**Conclusion/Findings**: EXOGEN is most effective in stable foot and ankle fractures, with reduced efficacy in femoral and fusion-related non-union. Symptomatic improvement may occur without complete union. Standardised compliance documentation and careful patient selection based on mechanical stability and biological potential are essential to optimise clinical and cost-effectiveness. Integration of compliance recording into routine workflows, improved patient education on adherence, and prospective data collection would enhance outcome evaluation, inform clinical decision-making, and support efficient NHS resource allocation.

# The Outcomes of Conservative and Surgical Management of Lisfranc Injuries Are Comparable: A Retrospective Cohort Study

Surgeon Lieutenant Commander Jack B J Wilby (MBChB, BSc(Hons), MRCSEd; Core Surgical Trainee NES East; Royal Navy)*
Nasir Chohan (BSc; University of Edinburgh Medical School)
Mr Adam Wertheimer (MBBS, FRACS; Monash Health, Melbourne)
Mr Jun Min Leow (MBChB, FRCSEd; Orthopaedic Registrar, Edinburgh Orthopaedics)
Mr Nick Clement (MBBS, MD, PhD, FRCS), Consultant Orthopaedic Surgeon, Edinburgh Orthopaedics)
Prof Andrew Duckworth (BSc(Hons), MBChB, MSc, FRCSEd, PhD), Consultant Orthopaedic Surgeon, Edinburgh Orthopaedics
Mr Timothy O. White (MBChB, BMedSci, MD FRCSEd, FFTEd), Consultant Orthopaedic Surgeon, Edinburgh Orthopaedics

**Acknowledgement:** Keri Swain, Research Nurse, Edinburgh Orthopaedics

**Introduction:** There is debate over the management of subtle Lisfranc injuries. This study reports the outcomes of a conservative approach in a Major Trauma Centre (MTC). The primary outcome of this study is incidence of complication and further surgery. Secondary outcomes will be Patient Reported Outcome Measure (PROMs) and duration of follow-up.

**Methods:** All patients diagnosed with Lisfranc injury at Orthopaedic Trauma clinic over a 5-year period (2020-2024) at a single MTC were identified. Patient records were examined to identify complications (neurovascular, infection), further surgeries (removal of metalwork, joint fusion, other) and time to discharge. PROMs data collection using Manchester Oxford Foot Questionnaire (MOXFQ) is pending ethical approval.

**Results:** 509 records were screened identifying 118 Lisfranc diagnoses. 61 patients were managed conservatively and 57 were managed surgically. 8 patients presented late, all of whom were treated surgically. There was no statistically significant demographic difference between the conservative and surgical treatment groups (conservative median age 41y, IQR 28y, 54.1% female; surgical median age 42y, IQR 29.5y, 54.4% female; p-value[age] 0.31, p-value[sex] 0.80). Energy of injury had no significant bearing on treatment modality (conservative 34.4% high energy, surgical 40.4% high energy; p-value 0.76). Median time to discharge was significantly shorter in the conservatively managed group (conservative 111.5 days, surgical 348.5 days; p-value<0.05). The incidence of complication was higher in the surgical group (relative risk 7.5, p-value <0.05). There was no significant difference in incidence of further surgery.

**Conclusions:** This study will be the largest retrospective cohort study to report comparative outcomes of conservative and surgical management of Lisfranc injury. Data available so far conclusively demonstrate non-inferiority of conservative management. The authors note significant heterogeneity of diagnostic methods for Lisfranc injury both within this MTC and in published literature. A follow-up study to define Lisfranc injury and its diagnosis is planned.

**Disclosure:** Nil.

# Preoperative Coronal Plane Deformity Does Not Affect Patient-Reported Outcomes After Total Ankle Replacement

Noureldin M. Sayed, Jun Min Leow, Chryssa Neo, Robert Kay, Hisham Shalaby, John McKinley
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**Background:** The impact of preoperative coronal alignment on the outcome of total ankle replacements (TAR) is uncertain. The primary aim of this study is to compare patient-reported outcome measures (PROMs) between preoperative neutral, varus and valgus deformities using the Manchester-Oxford Foot Questionnaire (MOXFQ). The secondary aim is to assess patient satisfaction and the incidence of postoperative complications following TAR.

**Methods:** This is a retrospective review of prospectively collected data. Demographics and surgical complications were collected from electronic patient records. PROMs collected include MOXFQ, EQ-5D-3L and patient satisfaction.

**Results:** One hundred and twenty-seven TARs were available for analysis and categorized according to coronal plane deformity. There were 38 patients with a varus deformity of >5 degrees, 26 patients with a valgus deformity of >5 degrees, and 63 patients within 5 degrees from neutral. The mean follow up period was 2.4±1.9 years. There were no significant differences in MOXFQ, EQ-5D-3L and patient satisfaction between neutral, varus or valgus groups ($p>0.05$). There were no significant differences in complications across all three groups ($p>0.05$)

**Conclusion:** Preoperative coronal plane deformities do not affect PROMs after TARs. This suggests that functional recovery following TAR can be achieved when appropriate surgical correction is undertaken.

# Post-Operative Outcomes for Patients with Pes Cavus

A. Griffin, D. Campbell
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**Introduction:** Cavus feet are commonly associated with neuromuscular conditions. They can often be challenging to treat and are associated with poor outcomes. A new method of approaching these patients using an algorithm published in 2014 aimed to improve this. This study used this algorithm for surgical correction of cavovarus feet based on flexibility. This classes the forefoot and hindfoot separately as; flexible, stiff or rigid with more rigid feet often requiring more intervention. It outlines staged procedures to correct muscle imbalance and restore a plantigrade foot using plantar medial releases, osteotomies and tendon transfers. The intention of intervening early is to prevent further deformity to create flexible balanced feet and reduce the need for future joint fusions that do poorly in these feet.

**Methods:** The post-operative outcomes of 24 patients with pes cavus were assessed by measuring pre- and post-operative angles of the feet and through self-reported post-operative outcomes measures (PROMS) obtained over 2 years. Using the algorithm's pathway, operations were tailored to the patient's unique requirements. Out of the 214 procedures on 37 feet, there were a total of 34 different procedures performed. On average, patients underwent 8.9 procedures each over 3.67 surgical episodes per foot. The most common procedures were peroneus longus-peroneus brevis transfer, deep plantar medial release, tendo-Achilles lengthening, and heel shift.

**Results:** The patients included in the study had a median age of 14.5 years at the time of their first surgery (range 5-80 years). Fifteen had a background of hereditary sensory-motor neuropathy, 4 of spinal cord tethering and 5 had cavus feet as the result of another syndrome.

**Conclusion:** This audit found that, following surgery, patients had a more plantigrade foot, which contributed to improved gait, balance and mobility. The average post-operative angles were: Meary's angle 12.7° (from 20.5°), Hibbs' angle 133.7° (from 116.4°), talo-navicular coverage angle 14.1° (from 25.8°) and AP first talo-metatarsal angle 15.1° (from 34.5°). Patients reported an average satisfaction of 7/10 at 26 weeks and 8/10 at 2 years. All responses to the PROMS questionnaire reported improvement at all stages. Given this, we would recommend the increased use of surgical intervention for correction of cavovarus feet using this algorithm as it maintains flexibility and avoids fusions.