Does the learning curve of minimally invasive chevron and akin osteotomies affect outcome of hallux valgus correction?
No Conflict to disclose

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Our disclosures are in the Final AOFAS mobile app
No conflicts of interest for this presentation
Introduction

• Minimally invasive chevron and akin osteotomy (MICA) has become increasingly popular in the correction of hallux valgus deformity.

• This study compared the radiological outcomes of the first cases performed by 2 surgeons using this technique with open scarf and akin osteotomy
Methods

• A retrospective review of hallux valgus corrections performed in Northumbria Healthcare NHS Trust between March and September 2014.

• Consecutive patients who underwent MICA correction by 2 surgeons trained on a cadaveric course were compared to a group of patients that underwent open scarf correction.

• Pre and post radiographic assessment was performed measuring
  – Hallux valgus angle (HVA)
  – Intermetatarsal angle (IMA)
  – Medial sesamoid position (MTS) using Hardy and Clapham classification.

• Complications were recorded
Results

• 14 MICA operations performed
• 13 MICA completed (1 converted to open)
• Comparison made with 14 Open Scarf Akin osteotomies.
• Average age of the MICA group was 46 vs. 55 for the scarf group
Intermetatarsal Angle

Pre SCARF

Pre Op – p 0.512

Change in angle p 0.680

Pre MICA

Post SCARF

POST MICA
Hallux Valgus Angle

Pre SCARF
Pre Op – p 0.698
Change in angle p 0.396
Hardy and Clapham Grade

Pre SCARF

Pre MICA

Post SCARF

POST MICA

Pre Op – p 0.251

Change in angle p 0.149
Complications

• Scarf
  – 1 superficial infection – resolved with Abx
  – 1 removal of prominent Akin screw

• MICA
  – 1 converted to open procedure
  – 1 long screw – removed
Conclusion

- Early experience of MICA resulted in similar outcomes and complications compared with open scarf and akin osteotomy.
References


