Hallux Valgus: Surgical Treatment
Intro

• Clinical Assessment
• Investigations
• Treatment
Clinical Assessment

- Severity of Symptoms
- Location of pain
- ? Secondary cause (i.e. RA)
- Patient Expectations
- “Not the incision but the decision”
Clinical Assessment

- Severity of Deformity – wide forefoot
- Stiffness / Correctability
- Hypermobile 1\textsuperscript{st} ray
- Lesser toe problems
- Pes planus
- Neurovascular exam
Investigations

- STANDING AP and Lateral
- Angles
  - DMAA, HV, Intermetatarsal Angle
- Congruent / Incongruent
- Degenerative Change
HV Angle < 15
## Classification

<table>
<thead>
<tr>
<th></th>
<th>HV angle</th>
<th>IMT angle</th>
<th>Incongruent MTPJ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>&lt;15deg.</td>
<td>&lt;9deg.</td>
<td>No</td>
</tr>
<tr>
<td>Mild</td>
<td>15-20deg.</td>
<td>9-11deg.</td>
<td>No</td>
</tr>
<tr>
<td>Moderate</td>
<td>20-40deg.</td>
<td>11-18deg.</td>
<td>Yes (unless abnormal DMAA)</td>
</tr>
<tr>
<td>Severe</td>
<td>&gt;40deg.</td>
<td>&gt;18deg</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Surgical Decision Making

• Flow charts
• Know the principles and a few procedures
  – Akin
  – Chevron (and its modifications)
  – Proximal 1st osteotomy
  – Modified McBride’s
• 5 common scenarios
Scenario #1

- Older Patient
- Severe deformity (HV angle > 40)
- Inflammatory disease
- Degenerative Changes
- FUSION ? Keller’s ? Prosthetic arthroplasty
Scenario #2

- Hypermobile 1\textsuperscript{st} ray
- Lapidus Procedure
Scenario #3

• Young Patient (congenital Hallux Valgus)
• Congruent, Increased DMAA, Increased IMA
• All Extra Articular
  – Proximal
  – Chevron / Medial closing wedge distally
  – Akin
  – NO lat release / NO medial tightening
Can help fix the DMAA

60 degrees
Proximal 1\textsuperscript{st} Metatarsal Osteotomy

- Dome
- Opening/closing
- Myerson
Scenario #4

• Middle aged patient / wide forefoot
• Incongruent, Increased IMA, Normal DMAA
  – Proximal
  – Lateral release / Medial tightening (Modified McBride)
  – +/- Akin
Modified McBride

- Adductor Hallucis release
- Transverse metatarsal ligament release
- Lateral Capsular release
Scenario #5

- The most common one
- Middle aged female
- Not severe, Normal IMA, Slightly incongruent
  - Chevron, medial capsular tightening
  - +/- Akin
Complications

• Non-union
• AVN (avoid distal osteotomy and McBride’s together)
• Recurrence
• Hallux Varus
Hallux Varus
Case 1
Case 2
Case 3
!!Thank You!!