Title: Bone sparring surgery for hallux rigidus
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My disclosure is in the Final AOFAS Mobile App.
I have no potential conflicts with this presentation.
Background

- Cheilectomy is a common term which represents a range of different operative techniques.
- Some techniques advocated removal of 30–40% of distal 1st metatarsal.

AOFAS 2015
Hypothesis

- Joint pathology is a major source of pain equal to, or greater than dorsal impingement.
- Aggressive dorsal bone removal is unnecessary to pain relief and restoration of joint motion.
Methods

- Retrospective review of hallux rigidus patients who underwent 1\textsuperscript{st} MTP joint debridement and limited osteophytes resection
  - Demographics
  - Radiographic classification
  - 1\textsuperscript{st} MTP ROM
  - VAS, SF–36, AOFAS outcome measure
Dorsal, medial and lateral osteophytes were conservatively resected to preserve the normal contour of 1st metatarsal head.

Osteophytes were also resected from the proximal phalanx.

Joint surfaces were debrided to remove cartilage flaps and to gain stable edges.

Microfracture to cartilage defects.
Results

- 30 patients identified (25 female)
- Average 58 y/o
- Ave F/U 26.5 months
- Coughlin and Shurnas classification

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<tr>
<th>Grade 1</th>
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### Results

- **Outcome measures:**

<table>
<thead>
<tr>
<th></th>
<th>VAS</th>
<th>AOFAS (hallux)</th>
<th>SF–36m</th>
<th>SF–36p</th>
<th>ROM</th>
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<tbody>
<tr>
<td>Pre–op</td>
<td>6.4</td>
<td>56</td>
<td>57</td>
<td>43</td>
<td>39°</td>
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<tr>
<td>Post–op</td>
<td>1.8</td>
<td>73</td>
<td>55</td>
<td>51</td>
<td>42°</td>
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</tbody>
</table>

*Note:* VAS = Visual Analog Scale, AOFAS = American Orthopaedic Foot & Ankle Society, SF–36m = Short Form 36-item Health Survey (physical function domain), SF–36p = Short Form 36-item Health Survey (physical role domain), ROM = Range of Motion.
Discussion

- Satisfactory clinical outcomes achieved through chondral debridement, microfracture, and conservative osteophyte resection

- Results comparable to previous published series
Discussion

- Bone-sparing surgery for hallux rigidus re-focuses the emphasis on the joint pathology as a major source of pain.

- Advantage of preservation of bone stock for future reconstruction such as arthrodesis.
Conclusion

- Joint debridement contributes to 1st MTP joint pain relief in Hallux Rigidus patients
- Aggressive dorsal 1st metatarsal resection was unnecessary
References