Bone–sparing Surgery for Hallux Rigidus

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NO CONFLICT TO DISCLOSE

- Title: Bone sparring surgery for hallux rigidus
- Authors: Wei Shen, James Brodsky
- 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.
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 1st MTP joint debridement and limited osteophytes resection
  - Demographics
  - Radiographic classification
  - 1st MTP ROM
  - VAS, SF–36, AOFAS outcome measure
Surgical Technique

- 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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<th>Grade 1</th>
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<td>3</td>
<td>13</td>
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## Results

- **Outcome measures:**

<table>
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<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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<tr>
<td>Pre–op</td>
<td>6.4</td>
<td>56</td>
<td>57</td>
<td>43</td>
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<td>Post–op</td>
<td>1.8</td>
<td>73</td>
<td>55</td>
<td>51</td>
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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