Patient Related Outcome Measures in Foot and Ankle Surgery – Setting a Benchmark for Hallux Valgus surgery

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Disclosures

RS Ahluwalia

My disclosure is in the Final AOFAS Mobile App.
I have no potential conflicts with this presentation.
The purpose of the study was to:

- Review our patient reported outcomes for hallux valgus surgery and provide a benchmark to facilitate comparison with other studies.

- Identify the time taken for maximum improvement in outcome after surgical correction by scarf osteotomy.
Methods

• We identified 221 patients undergoing hallux valgus surgery from Aug 2010 – April 2013 in our unit.

• All patients were given pre-operative Patient Related Outcome Measure questionnaires – Manchester Oxford Foot and Ankle questionnaire (MOXFQ).

• All Patients completed questionnaires at 3, 6 and 12 months post surgery.

• A License was obtained to the use of the MOXFQ for use in service evaluation and approved by our institution’s Integrated Governance and Local Ethics Committee.
The MOXFQ is split into 3 domains, relating to symptoms over the previous 4 weeks:

- walking/standing
- pain
- social interaction

The total score ranges from 0 (best) to 64 (worst), and the responsiveness of this questionnaire has previously been investigated in the context of hallux valgus surgery at 1 year.

Statistical analysis was undertaken using a Student’s T-test.
Results

• 157 patients were found to have completed post-operative MOXFQ questionnaires (71.1% response rate).

• All patients had a scarf osteotomy and there were 6 revision procedures.

• Hallux valgus angle was
  – 32.4 degrees pre op
  – 15.6 degrees post op
Results

• The MOXFQ improved in all domains

• The mean largest improvement was in walking and standing (10.4) followed by pain (7.8) and social interaction (5.4) scores.

• All improvements were both clinically and statistically significant at P<0.05.
### Improvement in MOXFQ Domains with Time

<table>
<thead>
<tr>
<th>Activity</th>
<th>6 Months</th>
<th>12 Months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walking and standing</td>
<td>10.8</td>
<td>9.1</td>
</tr>
<tr>
<td>Pain</td>
<td>3.9</td>
<td>5.1</td>
</tr>
<tr>
<td>Social Interaction</td>
<td>4.5</td>
<td>4.8</td>
</tr>
</tbody>
</table>

No statistically significant difference in improvement between 6 and 12 months found as P>0.05*
Summary

• Our results show that the scarf osteotomy is a safe and a reproducible procedure for treatment of hallux valgus.

• Radiographic improvements are in line with previously published work by one senior author.

• There were marked improvements in all patient scores in all 3 domains of the MOXFQ after surgery that substantiates the current literature.
Conclusion

- We found that the MOXFQ is a useful tool in the assessment of patient related outcomes after scarf osteotomy for hallux valgus.

- There was no statistically significant improvement in scores seen beyond 6 months after surgery in our series.

- Suggesting that this would be an appropriate time to collect post operative outcome scores.
Conclusion

This research provides a benchmark for patient related outcomes from this surgery, with which others can measure and compare outcomes from their hallux valgus surgery at 6 months, the time at which we have shown maximum improvement.