Making the grade: Interim results of a novel objective assessment of surgical fellowship training.

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Introduction

• Assessment of training is important to ensure quality in surgical practice.

• Little is known about trainee outcomes from apprenticeships, and when competency reached.

• To date there are no specific outcome measures to identifying competency of peri-consultant trainee’s.
Aim

• We present the use of a validated patient-reported outcome measure (PROM’s) of an index procedure.

• This study reports the use of a patient focused assessment of fellowship training in both surgery and patient interaction.
Methods and Materials

- We prospectively reviewed 52 patients who underwent a scarf osteotomy for hallux valgus by a senior surgeon (MSH) or performed independently by 2 fellows (RSA & AA).

- Patients completed the Manchester Oxford Foot and Ankle Questionnaire (MOXFQ) preoperatively and at 3 months.

- We radiographically assessed as markers of technical success:
  - Pre and post-operative hallux valgus angles
  - Post-operative sesamoid position as proposed by Hardy and Clapham (1951) [see fig 1].

- Senior statistical analysis was sought from City University, London and the measured variables between the two groups were analyzed with a T-test.
Results: Surgical Success

• The mean pre operative HVA was 25.6° in the senior surgeon group and 26.7° in the fellow group (p>0.03).

• Post operative sesamoid position improved by 2.31 (1-5) in the senior author group and by 2.96 (1-7) in the fellow group (p<0.05).
Results: Patient Outcome

• All 3 MOXFQ domains improved in all patients

• Greater improvement in pain scores were observed in the senior surgeon group.

• Mean metric pain scores improved by 42.3 (61.9 to 19.6) in the senior surgeon group and 36.9 (60.7 to 23.8) in the fellow group (p<0.04).

• We also observed a mean difference improvement in raw social interaction scores of 4.4 between the two surgeon groups (p<0.05).
**MOXFQ: Patient Assessment**

<table>
<thead>
<tr>
<th></th>
<th>Pain</th>
<th>Social Interaction</th>
<th>Walking and Standing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Senior Surgeon</strong></td>
<td>42.3</td>
<td>34.7</td>
<td>50.7</td>
</tr>
<tr>
<td><strong>Surgical Fellow</strong></td>
<td>36.9*</td>
<td>32.4*</td>
<td>47.5</td>
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</tbody>
</table>

Table showing metric improvement in the three domains of the MOXFQ, after hallux valgus surgery. * P<0.04
Summary

• All patients had a significant clinical improvement according to the MOXFQ.

• A limitation of the study was that small numbers precluded any regression analysis for possible confounding variables.

• On going data capture will allow us to present more robust inferences
Conclusion

• Our interim results show that there is a learning curve to this index procedure.

• The fellows improve their results to near mentor levels by the end of 6 months.

• It would seem likely that the MOXFQ can be used to assess the standard of fellowship training.
References:
