Expectations, Satisfaction and Outcome of Ankle Replacements and Fusions at Minimum 4 years Follow-up.

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Introduction
To date outcomes of ankle replacements and fusions have focused on patient reported pain and function. However expectations for outcome may have a greater bearing on patient satisfaction. Preoperative expectations motivate patients to undergo foot and ankle surgery, and satisfaction may be determined as to whether or not those expectations are met. Patients may expect an outcome measured with regards to return to work, improvement in recreational activities, daily activities and reduction of pain and swelling. In this paper we wish to determine the expectations and satisfaction of patients undergoing ankle replacement and fusion with minimum four years follow up.

Methods
Patients undergoing ankle replacement and fusion by one of three surgeons were asked to fill out an outcomes questionnaire (MODEMS, AAOS) that records patient satisfaction, patient expectations and patient outcome. The questionnaire for expectation is a 25 point scale based on 5 questions with a score of 1 to 5 on each question (relief from symptoms, household and yard activities, sleeping, work, exercise) and scored out of 100. Preoperatively patients are asked what they expect from treatment, and postoperatively they are asked if the results of treatment are what they expected. A low score postoperatively indicates that expectations are met, and a high score preoperatively indicates high expectations. Satisfaction is measured on a five point scale from 1 to 5, in response to the question “if you had to live the rest of your life with the symptoms you have right now, how would you feel about it”. Outcome was measured using the MODEMs foot and ankle outcome questionnaire. 106 ankle replacements were compared to a cohort of 49 fusions with 4 to 8 years follow up.

Results
Preoperatively the ankle replacement patients had a higher expectation of outcome (82 points for replacements vs 72 points for fusions). Postoperatively patients with total ankle arthroplasty were less likely to achieve their expectations at six months (replacement 37/100, fusion 27/100), one year (replacement 32/100, fusion 23 /100) and two years (replacements 38 /100, fusions 22/100) with similar expectation scores at final follow up (replacements 27 /100, fusions 28/100). Satisfaction scores did not improve after surgery for both fusion and replacement, being 2.02/5 for replacement and 1.9/5 for fusion preoperatively, and 2.1/5 and 2.5/5 respectively at 2 years follow up. MODEM outcome scores improved after surgery and showed no difference at all time points between fusion and replacement. The preoperative score was 10.9 for replacements and 11.7 for fusions, improving respectively to a score of 36.9 and 37.3 at 2 years and 36.5 and 33.8 at four years follow up.
Conclusion
Expectations appear to be met and correlate with outcome after fusion and replacement. However expectations are higher and less likely to be met for ankle replacements despite similar outcome scores. This may reflect a lack of patient understanding of the outcomes of ankle replacement prior to surgery with unrealistic expectations.