Does Post-Traumatic Arthritis Produce Poorer 5 Year Patient Outcomes Following Mobile-Bearing Total Ankle Replacement?
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Little long term data is available on patient-reported outcome measures (PROMs) following total ankle replacement in patients with posttraumatic osteoarthritis (PTOA), osteoarthritis (OA) and rheumatoid arthritis (RA).

Patients with post-traumatic osteoarthritis have previously been felt to have poorer short and long term results following total ankle replacement, due to younger age, higher activity levels and greater patient expectations.
We report the 3 and 5 year outcomes for patients who underwent total ankle replacement with a mobile bearing prosthesis, comparing prospectively collected PROMs data for PTOA patients with those with OA and RA.
Methods

- We analysed patient demographic data, American Orthopaedic Foot & Ankle Society (AOFAS) scores, Foot and Ankle Outcome Scores (FAOS), the SF-36 Health Survey, and patient satisfaction scores, collected preoperatively and up to five years postoperatively.
- The study included 109 consecutive patients who underwent total ankle replacement between March 2006 and December 2009 (58 OA, 21 RA, 30 PTOA).
At one year postoperatively, the PTOA group and the RA group had better FAOS results for pain than the OA group.
There were no significant differences in FAOS scores between groups at three or five years.
At one and two years postoperatively, the PTOA group reported significantly better scores on the general health domain of the SF-36. At three and five years postoperatively, there was a trend for better scores in the PTOA group for all domains of the SF36, however none of these reached significance (P>0.05).
There were no significant differences in AOFAS scores or in patient reported satisfaction at any measured time point.
Our findings suggest that patients with posttraumatic osteoarthritis of the ankle can expect comparable five year outcomes after total ankle replacement with a mobile bearing prosthesis as can patients with osteoarthritis and rheumatoid arthritis.
References

- Total ankle replacement: The Results of 100 Mobility Total Ankle Replacements. PLR Wood, MT Karski, P Watmough. JBJS (Br). 2010; 92-B(7): 958-962.