Results of silastic arthroplasty for proximal interphalangeal joint degenerative disease in the hand

V Voon L Astle AJ Chojnowski

Department of Trauma and Orthopaedics Norfolk and Norwich University Hospital Colney Lane, Norwich, NR4 7UY

The aim of this study is to assess the outcome of proximal interphalangeal joint (PIPJ) arthroplasty with silastic (Osteotec) implants.

Twenty-eight implants were performed on 24 patients - 20 for primary osteoarthritis, 8 for inflammatory arthritis. Follow-up ranges from four to 55 months (mean 23 months). Silastic arthroplasty was offered to those who failed conservative management or declined arthrodesis and were not suitable for anatomic surface replacement implants.

The mean age was 62.4 years (Range 26 - 83). There were 20 female and 4 male patients. The primary outcome measure was Quick DASH (Disability of Arm Shoulder and Hand) scores. This data was prospectively provided by hand therapy database. The overall mean quick DASH score improved from 43 to 29 out of 100 (0= no disability). Overall mean arc of movement for all the PIPJ was maintained at 38° (Range 1°-80° pre-operatively; 12–57° post-operatively). The pre operative grip strength improved from 13.1 kg to 16 kg. Of the six index finger PIPJ's replaced, pinch grip improved from 3.2kg to 4.8 kg.

Our results support previous published data on silastic implants. Good patient satisfaction and pain relief was found over this follow-up period. There was one complication of stitch abscess treated successfully but no implant has been revised to date.