

Mid Term Result of the MOJE MTPJ Replacement - An Improvement on Previous Designs?

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Background: The painful 1st metatarso-phalangeal joint is a common presentation in outpatient clinics. Options for treatment include arthroplasty and arthrodesis. Previous MTPJ replacement implant designs have had poor mid-term success. The Moje prosthesis was designed to overcome some of the problems with earlier implants, and employs ceramic bearing surfaces and a press-fit tapered stem design. Previous studies have reported good early results in small numbers of patients.

Methods: Between February 2002 and December 2006 the senior author implanted 55 components in 48 patients. AOFAS hallux scores and satisfaction scores (0 to 10) were recorded at follow-up. Radiographs were analysed for component alignment, implant bone coverage and subsidence. The mean age of patients at implantation was 56 years (34-77). Average follow-up was 42 months (range 15 to 74).

Results: There were no patients lost to follow-up. Average AOFAS score was 72 (25 to 100) and satisfaction score was 8.2 (range 1 to 10). 82% stated they would have the same procedure again and 82% reported minimal or no pain. There were no deep infections but 35% of patients reported altered sensation. Four implants have been removed (8%) because of worsening pain and implant loosening. 50% of metatarsal implants and 80% of phalangeal implants were implanted within 5 degrees of the long bony axis. Average bony coverage was 80%, resulting in subsidence of 90% of metatarsal and 70% of phalangeal implants at follow-up.

Discussion: Despite the poor radiographic appearance in the majority of cases, this procedure has good clinical outcome at the mid-term stage with 92% implant survival. The long-term clinical significance of the radiographic appearances is currently unknown. Improved surgical technique, including better bony coverage, may reduce the risk of implant subsidence.

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