

MAÏA Trapeziometacarpal Joint Arthroplasty: Clinical and Radiological Outcomes of 80 Patients With More than 6 Years of Follow-Up

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Purpose Trapeziometacarpal (TMC) total joint replacement is increasingly being performed in Europe. MAÏA TMC total joint arthroplasty is a modular uncemented ball-and-socket hydroxyapatite-coated implant. This study assessed the midterm clinical and radiological results of the MAÏA TMC prosthesis.

Methods This single-center retrospective study involved 80 patients who underwent 96 MAÏA TMC prosthesis implantations from February 2006 to April 2009, and who had a minimum of 5 years' follow-up. Indications for the procedure were painful TMC joint osteoarthritis affecting activities of daily living and a failure of at least 6 months of nonsurgical treatment. Pre- and postoperative clinical and radiographic data were reviewed.

Results The mean age at surgery was 68 years (range, 53–84 years) and the median follow-up was 76 months (range, 60–102 months). The mean Quick Disabilities of the Arm, Shoulder, and Hand score improved from 61.3 ± 17.1 to 17.5 ± 16 . The mobility of the thumb was restored to a range of motion comparable with that of the contralateral thumb. Opposition, defined by the Kapandji score, was almost normal (9.2 of 10; range, 6–10), as was the final mean key pinch and grip strength, which improved by 26% and 43%, respectively. Among the 96 implants, 4 (4.2%) were surgically revised for trapezium loosening. One dislocation was treated with closed reduction; 3 (3.1%) posttraumatic trapezium fractures were immobilized for 8 weeks. Among the 26 preoperative reducible z-deformities, only 5 (19.2%) were not totally corrected after surgery. The procedure success, by survival analysis over 6 years, was 93% (95% confidence interval, 87–98).

Conclusions MAÏA TMC total joint arthroplasty may be a reliable treatment option for TMC joint osteoarthritis, with very good results for pain relief, strength, mobility, and restoration of the thumb length, providing correction of most thumb z-deformities. (*J Hand Surg Am.* 2017;42(10):838.e1-e8. Copyright © 2017 by the American Society for Surgery of the Hand. All rights reserved.)

Type of study/level of evidence Therapeutic IV.

Key words Trapeziometacarpal joint of the thumb, osteoarthritis, arthroplasty.



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