L-S1.1b The treatment of adult isolated ulna diaphysis fractures with intramedullary Ulna A Nail

G. Saka, T. Kurtulmus, N. Saglam, M. Ugurlar, C. Ozer, F. Akpinar. Department of Orthopaedics, Umranlye Training and Research Hospital, Istanbul, Turkey

Introduction: The main objective in the treatment of adult isolated ulna diaphysis fractures is, ensuring the stability against axial and rotational forces until the fracture line has been healed. In this study, the result of the multifunctional intramedullary ulna A nailing with minimal invasiveness which allows the patients to mobilize immediately after the surgery was evaluated. Material and Methods: Between May 2008 and January 2011, 18 patients who have 20 fractures of the ulna (2 bilateral cases),were retrospectively evaluated. 13 male and 5 female patients with the average age of 28 (range 18 to 64 years). All patients were allowed full range of motion without any external support. The results were evaluated according to Grace Eversmann and DASH scores. Results: The average follow-up time was 22 months (range 8 to 32 months),healing time was 13 weeks (range 10 to 14 weeks), the surgery time was 25 minutes (range 20 to 45 minutes), fluoroscopy time was 20 seconds (range 10 to 90 seconds). Patients were not observed with non-union, deep infection or radioulnar synostosis. According to Grace-Eversmann scoring system, the result in 15 patients (83.4%) was excellent, 2 patients (11.1%) were good and 1 patient (5.5%) was poor. The average DASH score was 8.08 (0–17.5). Conclusion: In the literature, for the adult ulna diaphysis fractures both conservative and different surgical treatments are suggested. Some of the advantages of the newly designed intramedullary ulna A nail that was used in our study is reduction of the surgery time, the application of minimal invasiveness that does not require or that quite reduce the use time of fluoroscopy, except for fracture reduction it does not require guidelines for the proximal and distal locking, and compression could be done on fracture line if desired.