



10 year follow-up of radial head excision for radial head fracture

4th AIDC Congress, Montreal, Canada

September 2012

Ricardo Frada*; A Neto**; V Resende*; F Leal*; JM Teixeira*; A Miranda*

* CHEDV, H. São Sebastião, Department of Orthopaedics, Division of Hand Surgery
Santa Maria da Feira, Portugal

** Medical Legal Division, Caixa Seguros



FE16 10 years follow-up of radial head excision for radial head fracture

Artur Costa NETO, Ricardo Frada, V Resende, F Leal, R Frada, JM Teixeira, Artur Neto, A Miranda - CHEDV H. São Sebastião Department of Orthopaedics Division of Hand Surgery SM Feira Portugal ,UML Caixa Seguros

Retrospective evaluation of 18 out of the 28 patients with less than 50 years old who were submitted to primary radial head excision for the treatment of comminutive radial head fracture with no evidence of elbow instability. Minimum follow-up was 2 years. The functional evaluation of the elbow was measured using Quick DASH score (Disabilities of the arm, shoulder and hand), MEPS score (Mayo Elbow Performance Score) and VAS scale (Visual analogue scale). Wrist preension strength was measured and it was made a radiologic evaluation of the wrist and elbow graduating the degree of arthrosis and proximal migration of the radio. Results: Medium time of follow-up was 95 months (maximum: 132 month ; minimum:28 month). Average age was 34 years old. All patients were right hand dominant and right and left elbow were equally affected. The most common cause, of fracture was fall in 78% (14). 33% (7) of the fractures were related to work accidents and conditioned a job change in 2 of these patients. The permanent impairment degree was 2,5 points in 5 patients and 5 points in 2 patients. MEPS mean score was 91,08 in which 9 patients scored excellent and only one scored fair. In the Quick DASH score mean score was 9,5. Using the VAS scale to evaluate the global satisfaction of the procedure we registered 1,33 representing a very good functional outcome. 61% (11) of the patients did not complain about elbow pain, 33% (7) had mild pain

and only 1 had moderate pain but no need to take analgesics regularly. Just 1 patient had wrist pain. The mean arc of motion of the elbow was 130°. Most of the patients presented signs of arthrosis of the elbow (14 mild and 3 moderate arthrosis). 78% of the patients had normal strength in flexion/extension in comparison with the contralateral arm. We did not verify wrist arthrosis in any patient. The mean radial proximal migration was 3mm. Conclusion: The retrospective study with a 10 year follow-up showed that radial head excision performed in young patients with comminutive radial head fracture with no evident instability have an elevated degree of satisfaction and functional outcome. Nevertheless, the long term sequelae of radial head excision may precipitate de-generative alterations of the elbow which may produce future impairment for the patient.

Key words: Radial head; fracture, impairment