RADIAL HEAD ARTHROPLASTY in DIFFERENT PATTERNS of INSTABILITY.

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Introduction
Surgical management of comminuted radial head fracture include excision of the radial head, reduction and internal fixation and arthroplasty.
In our hospital we indicate radial head arthroplasty in fractures types III and IV of Mason with valgus instability or Essex Lopresti injury.

Aim
Analyze the results of radial head prosthesis in three different patterns of instability: elbow triads, variation of Monteggia and comminuted not reparable head fractures.

Material and Methods
We made a descriptive retrospective study of radial head fractures.
Since 2005 to 2010 twenty-one radial head prosthesis were implanted in our hospital. We followed up 19 cases, during 54 months, 11 of them were women, with an average of 56 years. We had 9 elbow triads, 5 variation of Monteggia fractures and 5 radial head fractures associated with instability.

Results
Clinically, 12 patients achieved excellent results (6 triads, 3 variation of Monteggia and 3 radial Head fractures associated with instability), and 7 achieved good results.
According to the pattern of fracture, patients with elbow triad and Monteggia presented excellent results, and patients with radial head fractures associated with instability had good results. At DASH score we obtained an average of 11.
Radiologically, 13 patients did not developed osteoarthritis in capitellum and 8 did not developed it in the ulno-humeral joint. Five patients developed heterotopic ossification. In 14 patients the neck was reabsorbed. Only 2 patients presented stem loosening, both long stem.
No instability was noted.

Conclusion
We found a low incidence of radiolucency or loosening, no instability, very good pronation and supination, a low complication rate and no infection.

References