

EXPECT THE UNEXPECTED-RADIAL HEAD REPLACEMENT WITH MINI PLATE AUGMENTATION

Mohd Hafizuddin Ahmad Sabri¹, Mohammed Harris Anwarali Khan¹, Jasvinder Singh Jagindar Singh¹

¹Hospital Taiping

Introduction: Treatment of irreparable comminuted fractures of the radial head Mason type III or type IV remains debatable. Radial head resection has been proposed as good option for surgical treatment, while in the last decades, the development of technology and design in radial head prosthesis has increased efficacy in prosthetic replacement. Internal fixation is challenging in most of the cases and can lead to implant failure.

Discussion: 39 years old man, complains of pain and swelling over the left elbow after fall from lorry. Examination, radial heads were tender with restricted movement (ROM) over left elbow. No neurovascular deficit. Radiographs showed an elbow joint dislocation with comminuted fracture of radial head. The patient was plan for radial head replacement. Kocher approach used for implantation. Intraoperatively noted humeroradial joint injury and surprisingly fracture fragment extending up to radial neck with bone loss. In order to achieve stable fixation mini plate was used to augment the prosthesis. The standard implant stem was not long enough to hold the shaft. Post operatively, patient was put on hinge elbow brace. Follow up after 6 weeks postoperatively elbow ROM 10-110 with minimal pain. 12 weeks post operatively, ROM was full. And pain score was 0 during active and passive rom of elbow. No limitation of supination and pronation.

Conclusion: Radial head arthroplasty if well positioned, is a valid solution in the treatment of irreparable comminuted fractures of the radial head with good results in the reduction of pain, recovery of movement and improved quality of life. There are three critical points during implant of radial head prosthesis: the stability of the stem, the size of the head, the height of the head and the stability of the humeroradial joint.