

Extracorporeal Reconstruction And Fixation Of The Radial Head

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INTRODUCTION:

Radial head fractures are common in adults. They are commonly resulted from falls on outstretched hands. We present a case of a radial head fracture Mason type II which was treated with extracorporeal reconstruction and fixation of the radial head.

CASE REPORT:

Mr K, a 30-year-old Bangladeshi laborer with no underlying medical illness, sustained a closed right radial head fracture Mason type II after an alleged fall on his outstretched right hand. Intra-operative intensifier images showed that the right radial head was displaced anteriorly. The radial head pieces were retrieved and were reconstructed extracorporeal. A low-profile mini plate was used for internal fixation. Post-operatively, the patient recovered well with a good result based on Mayo elbow performance score of 80.

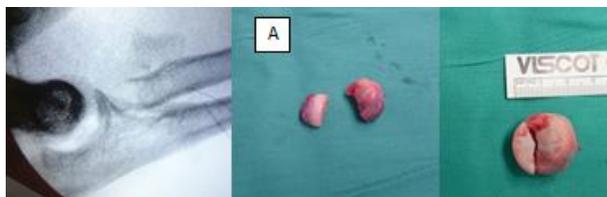


Figure A shows the anterior displacement of the right radial head on an intensifier image and the radial head after retrieval.



The radial head was reconstructed extracorporeal and was fixed with a low-profile mini plate.

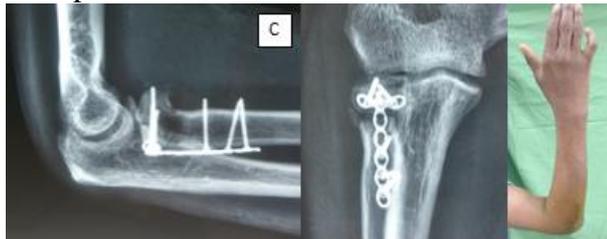


Figure C shows the post-operative plain radiograph of the right elbow and functional outcome of the elbow.

DISCUSSION:

Treatment of the radial head fracture is controversial with some surgeons prefer resection of the radial head while others prefer internal fixation. Internal fixation of the radial head is technically demanding especially in the case of severely displaced and comminuted fracture. Technique of on-table reconstruction of the radial head has been reported in the literature with good outcomes.

Although the fracture is not comminuted in this patient, the severely displaced pieces make it technically difficult to fix the fracture in vivo. Hence we retrieve the radial head pieces and reconstruct the radial head extracorporeal. Post-operative Mayo elbow performance score indicates that this is a viable option in patients with severely displaced and comminuted radial head fractures.

CONCLUSION:

Extracorporeal reconstruction of the radial head is viable in the patient sustaining severely displaced and comminuted fracture of the radial head.

REFERENCE:

GN Kiran Kumar et al. On-table reconstruction and fixation of Mason type III radial head fractures. Chinese Journal of Traumatology. 2015;18:288-292.