A Floating Terrible Triad Elbow - Our Experience

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INTRODUCTION:

Terrible triad of elbow constitutes a highly unstable form of fracture dislocation of elbow with radial head or neck fracture and coronoid fracture. Simultaneous ipsilateral fracture involving the humerus, radial head, olecranon with coronoid process and elbow dislocation is remotely rare occurrence.

CASE REPORT:

A 35-year-old, gentleman complained of deformity and pain over right upper limb after motor vehicle accident. Examination revealed a dislocated right humerus fracture with elbow and neurovascular. Findings were confirmed with plain x-rays and CT scan - right midshaft humerus fracture, dislocated right elbow with radial head (mason classification type 3) and olecranon with coronoid fracture (Figure 1 and 2). Emergency closed reduction and temporary immobilization of the fracture dislocation was done. Open reduction internal fixation of right mid-shaft humerus and proximal ulna and right radial head replacement were done electively after soft tissue condition permissible. Follow-up at 6 months with several sessions of physiotherapy, he was able to achieve a painless stable elbow with ROM right elbow from 20-90 degree with supination 0-90 degree and pronation of 0-45 degree respectively.

Treatment of a complex dislocation of elbow with associated radial head or neck fracture and, coronoid process fracture was challenging. With ipsilateral humerus fracture make it even more challenging and no case with such pathologies had been reported. Radial head is critical for stability and ROM of elbow joint. It is advocated that radial head arthroplasty will give a better outcome in comminuted or non reconstructable radial head fracture. Thus, is important to highlight the proper sequence approaching the fracture, appropriate

imaging for pre op evaluation and choice of treatment for such complex fracture.



Figure 1: X-ray of right humerus and elbow



Figure 2: CT scan of right elbow with 3D recon



Figure 3: Post operative X-ray

CONCLUSION:

We found that this rare pattern of injury is yet to be highlighted in most of the case and emphasis the importance of identifying the injury pattern as it might affect our management in future.

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