

A “Floating Elbow” after fall from Monkey-Bar

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INTRODUCTION

Supracondylar humerus fracture associated with ipsilateral forearm fractures aptly termed as “floating elbow” in pediatric population is rare and may sometimes be missed. The injury usually involves loading of a hyperextended wrist and elbow.

CASE REPORT

7 year-old boy with no known medical illness, fell from a monkey-bar of approximately 4 feet height while playing at the playground. He landed with his outstretched right upper limb, and sustained painful swelling over the right elbow and wrist. Upon arrival to Emergency Department, physical examination noticed there was no neurological deficit. Compartments were soft with intact distal circulation.

Radiological imaging showed a concomitant fracture of the supracondylar right humerus (Gartland III), fracture of distal end right radius and greenstick fracture of distal end right ulna. He underwent closed manipulative reduction and K-wire fixation of both supracondylar humerus and radius. Surgery was uneventful and he was discharged well days after.

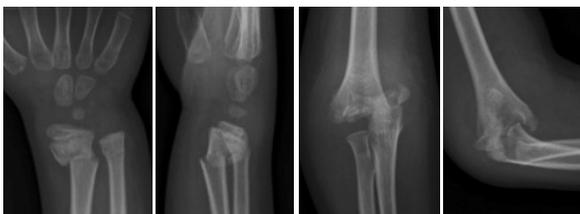


Figure 1: Pre-operative X-ray of right wrist and elbow



Figure 2: Post-operative X-ray of right wrist and elbow

DISCUSSION

The reported incidence of ipsilateral supracondylar fracture with forearm fracture in pediatrics varied from 2-13%. In this case, the radius fracture was first reduced and stabilized with two percutaneous K-wires, under the guidance of image intensifier. Followed by the supracondylar fracture was then reduced by longitudinal traction and fixed with three K-wires (two lateral and one medial). All fixations were later protected by above elbow backslab. The chances of compartment syndrome and neurovascular injuries are very high in such patients, due to the extensive soft tissue injury.

CONCLUSION

Early closed manipulative reduction and K-wire fixation of both components of this “floating elbow” injury is advisable, in order to provide better stability and prevents development of complications like compartment syndrome and elbow deformities.

REFERENCE

1. Singh, Ayush & Ramteke, Ujwal & Mangukiya, Hitesh. Ipsilateral Supracondylar Humerus Fracture With Distal End Radius Fracture - A Review of 10 Cases. Journal of Evolution of Medical and Dental Sciences. 5. 7499-7502. 10.14260/jemds/2016/1697.