

CASE REPORT : DO WE APPROPRIATELY MANAGE NECK OF HUMERUS FRACTURE?

Ab Aziz, MA

Department of Orthopaedic, Hospital Tengku Ampuan Najihah, Kuala Pilah, Negeri Sembilan.

INTRODUCTION:

Proximal humerus fractures account for 4% to 5% of all fractures. Two-part proximal humerus fractures at the surgical neck are more common. Displaced fractures of this type continue to pose challenging management problems for orthopaedic surgeons and the optimal treatment has remained a matter of controversy.

REPORT:

A 14 years old girl, alleged motor vehicle accident and complain of right shoulder pain & restricted movement. On examination, tenderness around humeral neck, reduced range of motion of right shoulder. Distal pulses palpable and good circulation. Plain radiograph showed displaced fracture neck of right humerus.

The patient is placed in the beach-chair position with the affected shoulder resting outside the perimeter of the operating table under general anesthesia. This setup allows easy access to an image intensifier, for anteroposterior and axillary views of the proximal end of humerus. After the arm and shoulder are draped freely, only longitudinal traction force is applied to the upper extremity with the shoulder in adduction to enable fracture reduction. Counter-traction forces pulls on a folded sheet wrapped around the patient's chest. Confirmation of realignment is undertaken with adjustment of the C-arm of the image intensifier. Reduction of head-shaft fragments is performed with Kirschner wires inserted from the anterior, posterior, or lateral side according to the direction of displaced head. These reduction wires are also placed in different positions depending on the fracture angulations in the sagittal plane. The reduction was confirmed with intraoperative image intensifier.

The arm is immobilized in a sling for 3 to 4 weeks. Passive and pendulum exercises are initiated as soon as pain and swelling subside.



Figure 1: Pre-operative radiograph



Figure 2: Post-operative radiograph

CONCLUSION:

There has been great controversy about management of complex fractures of the proximal humerus. The method of closed reduction and percutaneous fixation bears the inherent advantages of minimizing tissue destruction that preserves vascularity to the humeral head and facilitates early tissue healing.

REFERENCES: