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Management of Neglected Elbow Dislocation in a Rural Setting

Dr Manali Karwa[1], Dr Kailash Ghorpade[2], Dr Ashish Somani[3]

[1]Junior Resident, Department of Orthopaedics, DBVPRMC, PIMS
[2]Guide and Professor, Department of Orthopaedics, DBVPRMC, PIMS
[3]Head of Department, Department of Orthopaedics, DBVPRMC, PIMS

Abstract
Elbow is the 2nd most common joint to get dislocated after shoulder joint in adults. Elbow dislocations which are left untreated for more than 3 weeks are called as neglected elbow dislocation. Here we present a 29 year old female, case of neglected posterior elbow dislocation of 3 months, post RTA , who presented with elbow joint stiffness and inability to do activities of daily living. Patient was treated with open reduction and ulnohumeral pins as patient was not willing for any other surgeries due to financial constraints. Patient had a good functional outcome, which was measured using Mayo Elbow Performance Score.

Keywords: Elbow Dislocation, Neglected, Bone Setter

Introduction

Neglected elbow dislocations are a common problem in rural settings,due to lack of availability of specialist doctors, delay in seeking proper treatment, reliance on bone setters and lack of understanding about the severity of injury.

Patients usually present with joint stiffness, inability to perform activities of daily living, bony prominences, reduced ulnar nerve sensations and sometimes compartment syndrome.

The vigorous massage and manipulations done by bone setter, increases the risk of myositis ossificans and can cause neurovascular entrapment in joint leading to neurovascular deficit. Prolonged immobilisation done after massage leads to stiffness of joint.

Elbow dislocations are classified as Anterior,Posterior,Medial and Lateral depending on postion of proximal radioulnar joint in relation to distal humerus.

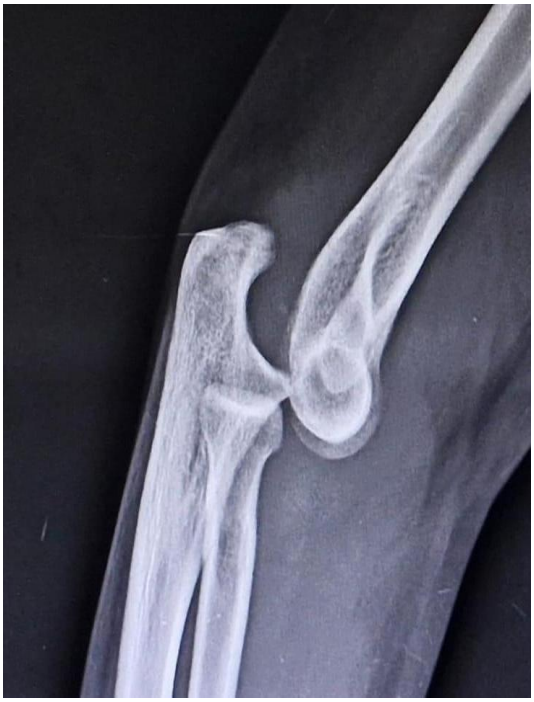
Most of the elbow dislocations are associated with fractures of radial head or neck,distal humerus ,olecranon and coronoid process and are thus called as complex dislocations.

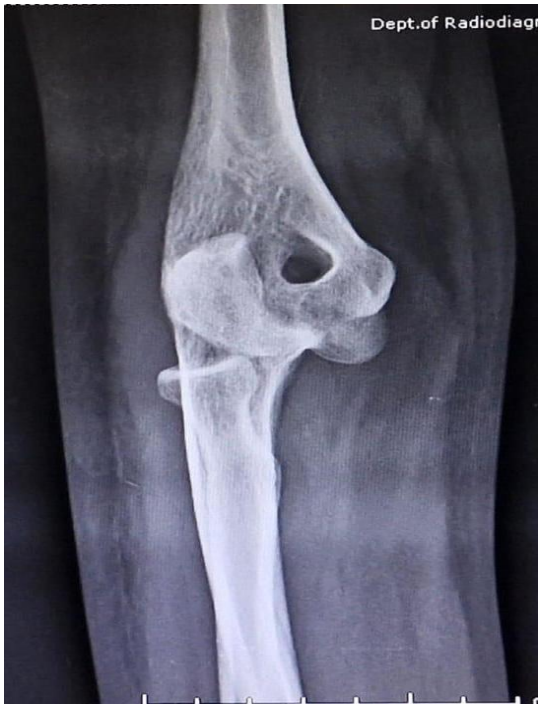
Case Presentation

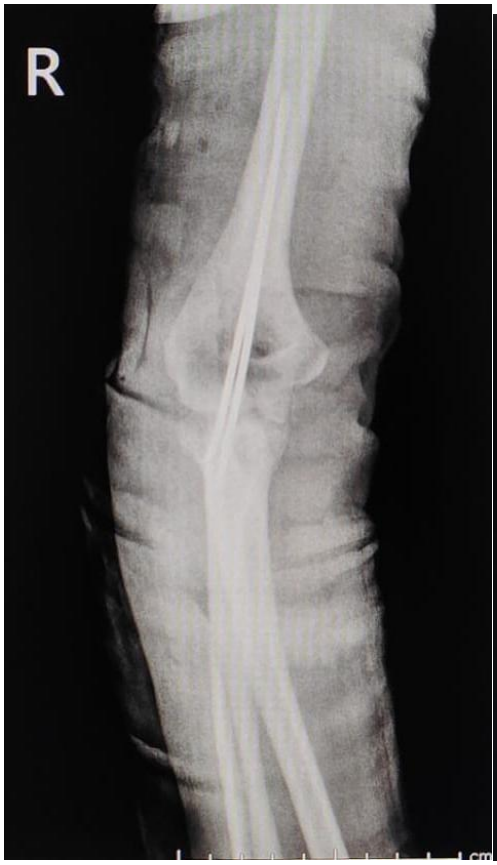
A 29 year old female presented with elbow joint stiffness and inability to do activities of daily living, in her dominant hand since 3 months, following a history of RTA. Patient had underwent massage, manipulation and immobilisation of elbow in extension for 1 month by a bone setter. On clinical examination there was elbow deformity with upper limb in fixed extension, with loss of three bony point relationship and reduced ulnar nerve sensations on the affected side.

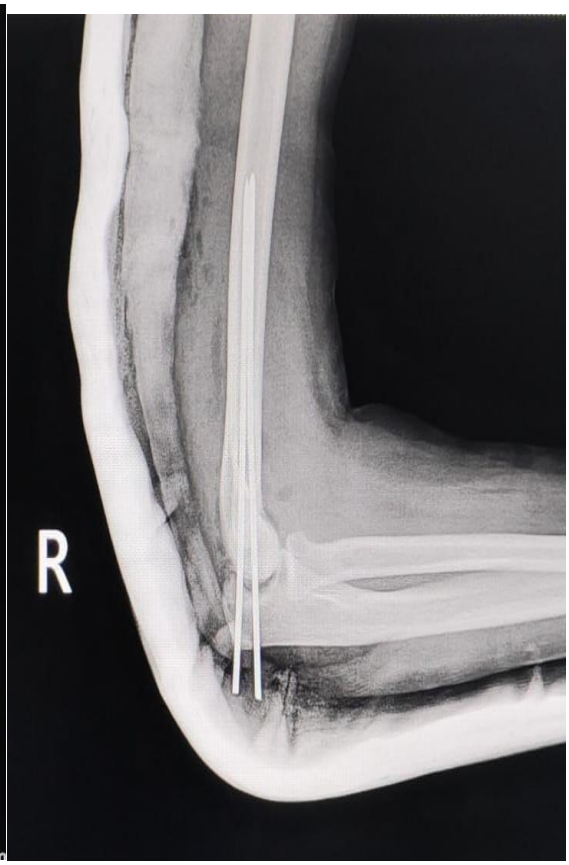
Aim of treatment was to achieve reduction and stability of elbow joint and improved range of motion. Xrays of elbow joint AP and lateral views done.

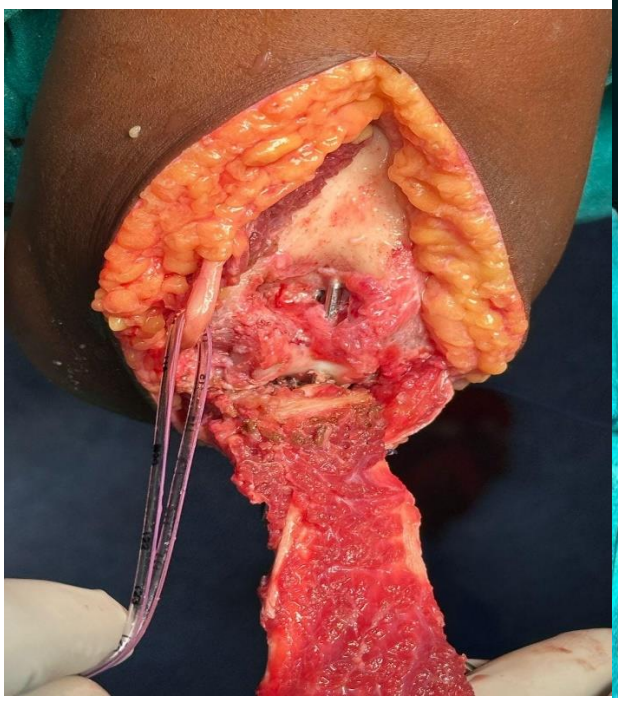
Open reduction and midline incision taken by posterior approach.Triceps fascia identified and dissected to expose the dislocation site. Ulnar nerve identified and protected. Traction and manipulation done to achieve reduction at elbow. Olecranon transfixed to humerus with two k-wires in 90 degrees of elbow flexion,intact nature of ulnar nerve confirmed, closure done and above elbow slab given. Arm was immobilised for 4 weeks and active finger movements started post-operatively. K-wires removed after 4 weeks and protected elbow ROM started.

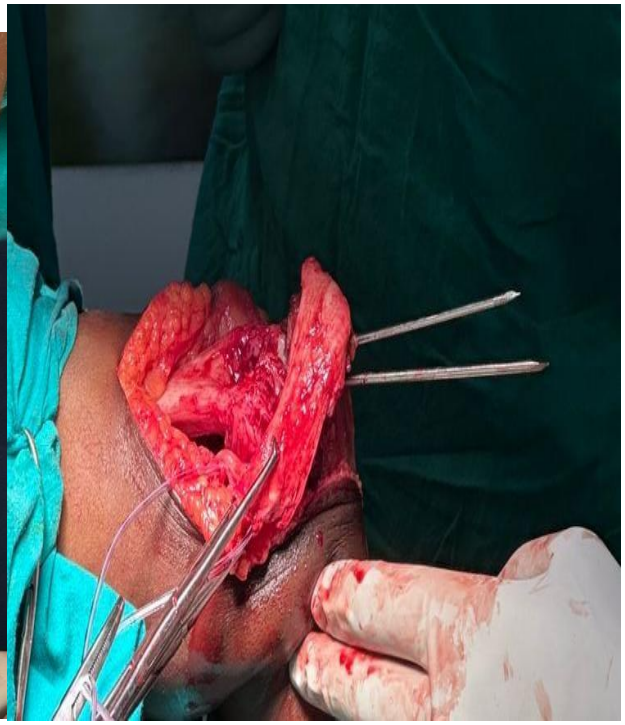












Conclusion

Patient had a good functional outcome. Mayo Elbow Performance Score improved from 20 pre-operatively to 75 post-operatively on 2 months follow-up.

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