

## Case Report

# Long term outcome of ipsilateral dislocation of open displaced elbow with close shoulder dislocation: a case report

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### ABSTRACT

52 years old man presented with open dislocation of elbow due to road traffic accident was not complaining of another joint injury or pain was radiographed as per protocol of including the adjacent shoulder joint and incidentally discovered with anterior dislocation of shoulder was treated with close reduction of shoulder dislocation and debridement as well as reduction and trans fixation of ulno-humeral joint with k-wires. Skin coverage later was done. Patient recovery was excellent in terms of motion at both joints. The purpose of reporting of this case is to convey a message that ipsilateral dislocation of shoulder and elbow is a very rare occurrence but do occur and a high degree of suspicion and imaging protocol can save from missing this event.

**Keywords:** Open elbow dislocation, Ipsilateral, Shoulder dislocation

## INTRODUCTION

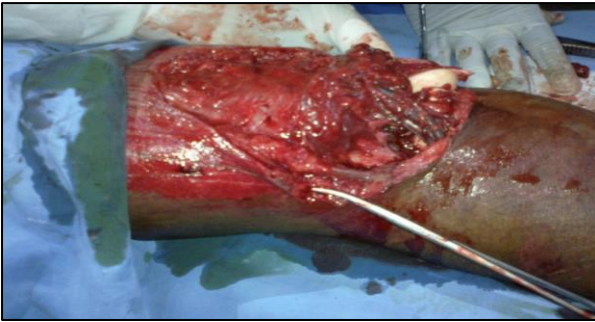
Dislocation of the elbow joint is the second most common dislocation in adults in the upper limb, as compared to shoulder which holds the no one position.<sup>1-5</sup>

However ipsilateral dislocation of shoulder is a rare entity in day to day practice and in reporting of injuries in literature. However high velocity trauma and fall from heights may impose a higher risk for such cases.<sup>6,7</sup>

However incidents of missing a dislocation of shoulder during primary treatment of a patient is common especially in the patients treated at limited infrastructure or high volume centers if the patient is not fully awake or communicating properly.<sup>3,4</sup> In such cases a high degree of suspicion while examining or ordering investigation for imaging can save the complications of late treatment of dislocation and fear of allegations of negligence or tarnishing of surgeons image. Following a protocol of imaging adjacent joints is the key to success.

## CASE REPORT

52 years male presented to us with right upper limb road traffic accident (RTA) induced injuries. On local examination of right upper limb shows 3 inches by 4 inches sized wound on anterior aspect of elbow. Muscles and Neuro vascular tissues were exposed as there was some skin loss also. Distal pulsation and Neurology were intact. Patient was stable otherwise. Patient was not complaining of any pain on another joint. On Radiological examination which includes his shoulder as a routine protocol we found the anterior dislocation of shoulder also along with displaced posterior dislocation of elbow. Patient was taken in operation theatre and shoulder was reduced by close method. Elbow was debrided and reduced and transfixed by k-wire through ulna. Patient was reported for debridement and skin grafts placement on raw area after 10 days of injuries. Patient was treated in pop slab and mobilization started after 6 weeks. Patient did very well and even after 8 years show excellent results at elbow and shoulder joints.



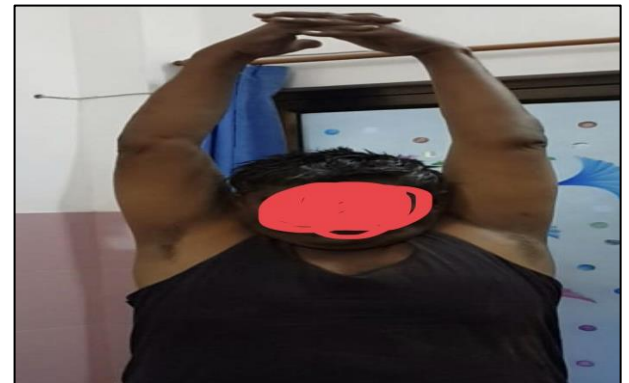
**Figure 1: Open crush injury at anterior aspect of elbow with skin loss and structure exposed.**



**Figure 4: Condition of local skin graft after complete recovery.**



**Figure 2: Pre-operative X-ray shows dislocation of shoulder and displaced elbow joint.**



**Figure 5: Full range of motion over-head abduction of shoulder and near complete extension of elbow.**



**Figure 3: A) Reduced shoulder and B) reduced but transfixated elbow with k wire in antero-posterior and lateral views.**



**Figure 6: Full flexion of elbow and external rotation of shoulder.**

## DISCUSSION

Now a days it's common to have close dislocation of elbow without open injuries to elbow. But it's very rare to have a shoulder dislocation. Many times it is missed as patient doesn't complain about shoulder injury in head injuries case or under drug intoxication or alcohol as compared to severe pain around open elbow and it's diagnosed later on while patient returns for follow up leading to more difficult to treat. Review of literature shows its first reported a case in 1981 by Suman RK.<sup>2</sup>

Many incidents show fractures of humerus and forearm along with ipsilateral elbow and shoulder dislocation.<sup>6</sup> But when humerus is operated by the time dislocation can be diagnosed. Obesity may mask the symptoms and sign of shoulder trauma. In such cases high degree of suspicion and protocol for imaging like always include the shoulder while ordering for the elbow joint so minimizing the chance of error.<sup>8-10</sup>

## CONCLUSION

Always keep a high grade of suspicion for shoulder injury while dealing with elbow dislocation or injuries. Emphasizing the importance of assessing the adjacent joints in patients with trauma in order not to miss any accompanying pathologies.

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