

Iatrogenic Median Nerve Injury In Gartland 4 Supracondylar Humerus Fracture: A Case Report

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INTRODUCTION:

Supracondylar humerus fractures that are displaced often managed by closed reduction and percutaneous pinning. Between 2 and 6.5% of such operations resulted in nerve injury².

REPORT:

A 9-year-old boy alleged fall with an outstretched hand, sustained pain and swelling over left elbow. Examination found a deformity over elbow region, swelling with minimal ecchymosis with intact neurovascular status. Closed reduction and percutaneous pinning over the left elbow were done on the following day using three lateral K-wires over the lateral approach. Postoperatively, noted Kiloh-Nevin sign with reduced sensation over the median nerve distribution. Open reduction, median nerve exploration, and revision of the K-wires were done via an anterior approach. Intraoperatively, K-wire was seen abutting the median nerve, however the median nerve appears intact. During two months of post-operative review at our clinic, recovery was noted with minimal residual numbness over the tip of the index and middle fingers.



Figure 1: Intraoperative photograph demonstrating the anterior approach through a transverse incision. Noted the K-wire was abutting the median nerve.



Figure 2: X-ray closed fracture supracondylar left humerus Gartland 4



Figure 3: X-ray post-operation, open reduction, and percutaneous pinning

CONCLUSION:

Even though there is a risk of iatrogenic nerve injury, closed reduction, and percutaneous pinning are the preferred treatments because they provide an instant fixation, and reduce the risk of infection and compartment syndrome¹. We recommend a detailed clinical examination of these patients with special attention to neurovascular findings. Furthermore, in the event of vascular injury and nerve palsy, we advise prompt surgical exploration and revision. Since iatrogenic nerve injuries are a benign disorder, good recovery and outcomes are anticipated in many situations³.

REFERENCES:

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