

Rare Case of Inferior Shoulder Subluxation Post Midshaft Humerus Plating

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INTRODUCTION:

Inferior shoulder subluxation is frequently seen after fixation of proximal humerus. There are many cases reported worldwide and the cause has been widely discussed. However no case has been seen or at least reported after midshaft of humerus osteosynthesis. We are going to discuss such case that has been seen in our centre

REPORT:

27 years old malay gentleman alleged fall from 2 meter high sustained closed spiral fracture midshaft of left humerus on 14/12/2023. Patient was scheduled for open reduction and plating of humerus using narrow DCP. Operation was scheduled on 21/12/2023. During operation anterolateral approach of humerus has been used and incision was extended proximally via deltopectoral region for adequate visualization. Post operatively noticed on check x-ray despite good reduction and stabilization there is inferior shoulder subluxation seen which is not seen previously on preoperative x-ray. However during follow up at 2 weeks, left shoulder appear to be normal back no subluxation seen and patient regain normal shoulder function.



Figure 1: Pre operative x-ray



Figure 2: Immediate post operative x-ray



Figure 3: 2 week post operative x-ray

DISCUSSION:

Causes of inferior shoulder subluxation has been widely discussed in many journals worldwide, one of the main causes is prolonged time which lead to prolonged muscle fatigue and atonia due to longer time of application of retractor. This is usually seen on proximal humerus fixation that required prolonged retraction of muscle such as deltoid muscle. However in this case even though the area of interest at midshaft, the incision has been made proximally to the deltoid region and this may cause muscle fatigue that lead to weak dynamic stabilization of the shoulder joint and cause inferior shoulder subluxation. Other factors include prolonged retraction and compression of peripheral nerve may also lead to same issue. Most cases reported that patient may recover normal shoulder joint congruency at least within 3 months and in this case patient recover as soon as within 2 weeks post operative.

CONCLUSION:

Proper and gentle soft tissue manipulation may help in preventing inferior shoulder complication in proximal or midshaft humerus fixation.

REFERENCES:

1. Inferior subluxation of humeral head after osteosynthesis by ryogo furuhata