Outcome of Shoulder Hemiarthroplasty (HAS) for Complex Proximal Humerus Fracture in District Hospital – A Case Report

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INTRODUCTION:

The goal of hemiarthroplasty for proximal humeral fracture is to return normal biomechanics, establish acceptable range of motion, and grant a pain-free functional joint however still debatable.

REPORT:

A 54-year-old gentleman had a fall to his left shoulder following a motorbike skidded. He presented with an injury to the left shoulder without neurovascular deficit. Imaging studies revealed a comminuted fracture of left humeral neck and head with distruption of glenohumeral joint and fracture of anteroinferior left glenoid (4-part Neer)

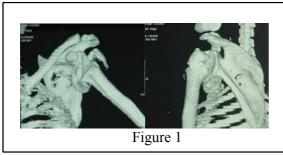
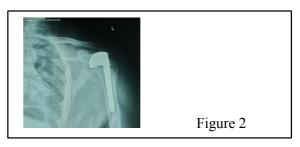


Figure 1: CT 3D-recontruction of left shoulder

He underwent a cemented hemiarthroplasty on day 22 post-injury via deltopectoral approach with standard beach-chair position. The fracture was identified as 4 parts fracture with humeral head displaced anteriorly. The rotator cuff tendons were intact however long head of biceps tendon was ruptured. Biceps tenotomy was performed. Postoperatively, he was placed in a 45° abduction brace for 6 weeks. Passive range of motion to 90° elevation was started then progressed to active assisted movements. Serial radiographs showed satisfactory implant position and height. At 2 months post surgery, tuberosity union was achieved.

Figure 2: X-ray of Left Shoulder after 2 Months of surgery



At 6 months, he had a limited range of motion (abduction 45°, adduction 30°, flexion 30°, extension 15°, internal rotation 20° and external rotation 5°). However from his perspective, the treatment was successful until he was able to resume his original job.

CONCLUSION:

When joint preservation surgery is not an option for complex proximal humeral fractures, shoulder hemiarthroplasty is the standard of care. The end result may be beneficial in terms of quality of life and functionality.

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