

**Medial Plate Augmentation for 11B and 11C Proximal Humeral Fractures: Surgical Technique Description**

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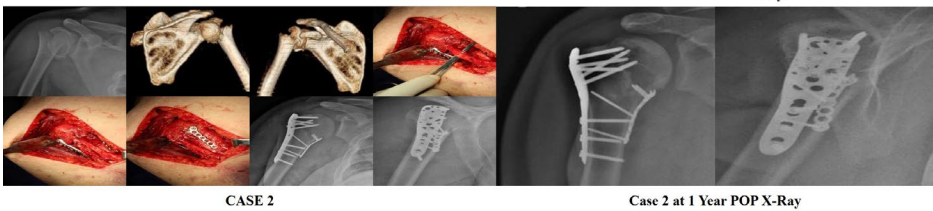
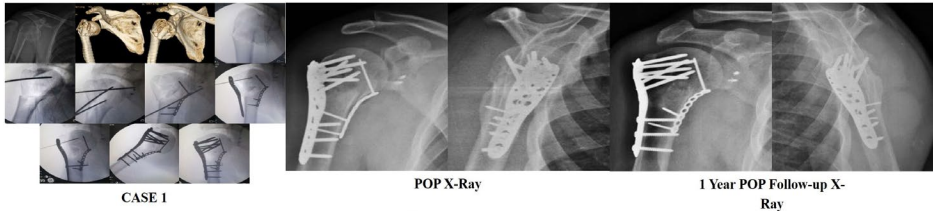
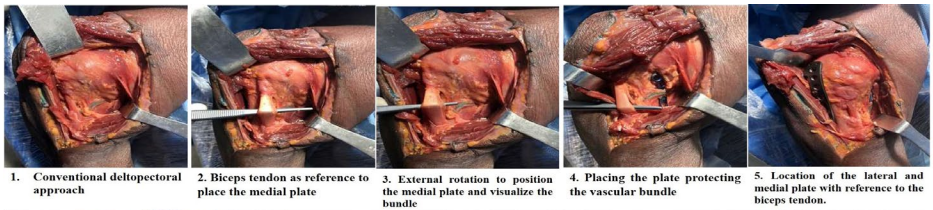
**Purpose:** Medial column stability is the key to successful surgical treatment of 11B and 11C (OTA/ AO Fracture Classification) proximal humeral fractures. The double-plate augmentation fixation technique is a novel treatment that provides double column support and stability of the fracture reduction.

**Methods:** Seven patients aged <60 years with 11B and 11C proximal humeral fractures with involvement of the medial cortex were studied. A deltopectoral approach is performed through which the fracture is exposed, reduction and varus correction is performed, then provisional fixation with threaded guides and depending on the configuration of the fracture, the order of the plates (lateral and medial) is decided. Follow-up at 12 months postoperatively involved a review of AP and lateral shoulder radiographs and functional assessment using the Disabilities of the Arm, Shoulder and Hand scale.

**Results:** Most patients were men (87.5%), and the mean age was 36.2 ± 14 years. Fracture consolidation with no medial cortical collapse was achieved in all cases at the 12-month follow-up. There was no varus collapse of the most proximal screws. 85.7% of those affected did not show limitations to perform usual activities after surgical management of the fracture, and 71.4% had a range of motion within functional parameters for daily and work activities.

**Conclusion:** 11B and 11C proximal humeral fractures can be reconstructed through the double-plate system with good functional and radiological outcomes. This technique is

an option to consider as strategy to avoid the varus collapse of the described proximal humeral fractures.



NEW TECHNIQUES

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