

Distal Clavicle Bone Augmentation for Shoulder Instability Case Series

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Background: Glenoid bone loss remains one of the most significant risk factors for recurrent instability following surgical management of glenohumeral instability. Controversy exists regarding the optimal procedure for reconstructing glenoid bone loss to address recurrent glenohumeral instability. The distal clavicle autograft (DCA) bone block procedure has garnered increasing popularity as an easier, more cost-effective, and safer alternative to traditional procedures such as the Latarjet.

Purpose: To report the clinical outcomes of a single-surgeon case series of patients managed with arthroscopic DCA for glenoid bone loss with suture button fixation at minimum follow-up of one year.

Methods: A retrospective review was performed of all cases of recurrent anterior glenohumeral instability treated with DCA by a single surgeon. Patients were included if DCA was performed arthroscopically with two suture buttons for fixation with a minimum clinical follow-up of one year.

Results: At surgery, the mean glenoid bone loss was 26.8%, and, at harvest, the average length, thickness, and width of the distal clavicle autograft were 22.8mm, 11.9mm, and 10mm, respectively. At a mean follow-up of 28 months (range, 14-39 months), no patients had evidence of recurrent instability. One patient was noted to have one loose posterior extracapsular button without clinical complication. No other complications were noted, including change in the graft position, transient neurological deficits, or radiographic findings of joint space narrowing.

Conclusion: The use of a distal clavicle autograft with suture button fixation arthroscopically is a promising solution for managing patients with recurrent glenohumeral instability associated with glenoid bone loss.

Study Design: Case series; Level of evidence IV

Key Terms: Glenoid Bone Loss, Distal Clavicle Autograft, Bone Block Procedure, Suture Button Fixation