JRF ORTHO

SHOULDER CLINICAL SNAPSHOT:
KEY FINDINGS FROM RECENT LITERATURE

Osteochondritis Dissecans of the Humeral Head: A Pediatric Case Series

JSES Rev Rep Tech. 2026 Mar

Arvesen JE, Dinulescu AL, Lampe KC, Todesco CR, Ellis HB

- This pediatric case series describes the surgical management of osteochondritis dissecans (OCD) of the humeral head using fresh osteochondral allograft transplantation.
- The authors demonstrate the use of both BioUni and circular osteochondral plugs to restore focal humeral head defects, highlighting surgical decision-making based on lesion characteristics.

JRF ORTHO TAKEAWAY:

Osteochondral lesions of the pediatric humeral head present unique reconstructive challenges due to lesion size, location, and the need to preserve native joint anatomy. JRF Ortho remains committed to providing fresh osteochondral allograft options to support surgeons treating these complex shoulder cases.

The Effect of Concavity Restoration on Glenohumeral Stability in a Glenoid Bone Loss Model: Comparing Distal Tibial Allograft vs Medial Tibial Plateau Allograft vs Distal Clavicle Autograft

Am J Sports Med. 2026 Mar

Cusano A, Jahandar A, White AE, Kontaxis A, Basseri B, Gulotta LV, Dines DM, Dines JS, Fu MC, Blaine TA, Taylor SA

- The purpose of this study was to compare glenoid concavity and anterior glenohumeral stability following reconstruction with a variety of osteochondral allograft sources.
- Computed tomography (CT) was used to assess glenoid depth and quantify restoration of bony shoulder stability.
- Distal tibia, medial tibial plateau, and distal clavicle all restored glenoid concavity to levels comparable to the native glenoid.

JRF ORTHO TAKEAWAY:

While distal tibial allografts (DTAs) remain the most widely utilized allograft for glenoid bone loss, this study suggests that medial tibial plateau and distal clavicle osteochondral allografts may represent promising alternative allograft sources.

Surgical Stabilization for Recurrent Shoulder Instability Using Distal Tibial Allograft: Open Technique With Fresh Allograft Versus Arthroscopic Technique With Frozen Allograft, a Cohort Study

The American Journal of Sports Medicine. 2026

Wong I, Adriani M, Remedios S, et al.

- This retrospective clinical study compared open fresh distal tibial allograft (DTA) reconstruction with arthroscopic frozen DTA for the treatment of anterior glenoid bone loss.
- At a minimum of 2-year follow-up, there were no significant differences in patient-reported outcome measures or CT-based allograft assessment between the two groups.
- Differences in surgical technique and allograft positioning (intra-articular versus extra-articular) may have influenced the findings, and longer-term follow-up is needed to better understand allograft remodeling and resorption over time.

JRF ORTHO TAKEAWAY:

The optimal allograft choice for glenoid bone loss continues to evolve and may be influenced by both allograft characteristics and surgical technique. As additional long-term evidence emerges, JRF remains committed to providing fresh distal tibial allografts to support surgeons treating complex shoulder instability.

Traumatic Failure of Primary Latarjet Revised With Distal Tibial Allograft Reconstruction: A Case Report

Cureus. 2026 May

Marra RM, McDowell C, Turnbull J

- The Latarjet procedure has demonstrated reliable outcomes for the treatment of anterior shoulder instability; however, revision following graft failure remains technically challenging.
- This case report describes the revision management of a failed primary Latarjet using a distal tibial allograft (DTA) and outlines the postoperative rehabilitation protocol.
- The report also includes postoperative imaging demonstrating osseous incorporation of the DTA following revision reconstruction.

JRF ORTHO TAKEAWAY:

DTA's provide an anatomic osteochondral allograft option for reconstructing glenoid bone loss. This case report adds to the growing body of literature supporting the use of DTA for revision of failed Latarjet procedures and highlights its potential to achieve successful allograft incorporation in complex revision settings.

The Effect of Capsular Repair Location on Humeral Head Position and Translation After Distal Tibial Allograft Reconstruction: A Cadaveric Study

Am J Sports Med. 2026 Jan

Fury MS, Cirino CM, Jahandar A, Retzky JS, Brusalis CM, Rauck RC, Gulotta LV, Blaine TA, Fu MC, Warren RF, Kontaxis A, Taylor SA

- This biomechanical study evaluated humeral head positioning, anterior translation, and the effect of capsular repair location following distal tibial allograft (DTA) reconstruction of the glenoid.
- Capsular repair to the native glenoid resulted in decreased anterior translation and a posterior shift in the resting humeral head compared with the intact shoulder.
- In contrast, DTA reconstruction without capsular repair or capsular repair to the allograft restored glenohumeral positioning closer to the native state.

JRF ORTHO TAKEAWAY:

As the use of DTA's continues to expand, optimizing surgical technique is just as important as allograft selection. This study demonstrates that capsular repair location can significantly influence postoperative shoulder biomechanics, providing surgeons with valuable insights to help restore more native glenohumeral mechanics.

JRF ORTHO

7245 S HAVANA ST, STE #300
CENTENNIAL, CO 80112
M 877-255-6727 F 303-649-1658
JRFORTHO.org