



JRF ORTHO

2025 Q3-Q4 DISTAL TIBIA AND TALUS UPDATE

DISTAL TIBIA AND TALUS CLINICAL SNAPSHOT: KEY FINDINGS FROM RECENT LITERATURE

Comparison of Cartilage Thickness and Curvature Analysis Between Glenoid, Distal Tibial Allograft, and Subtalar Allograft for Anatomic Glenoid Reconstruction: The Magnetic Resonance Imaging-Based Mapping Study

Am J Sports Med. 2025 Dec

Ganokroj P, Watkins L, Hollenbeck JFM, Adriani M, Whalen RJ, Garcia AR, Dickinson NJ, McBride TJ, Rupp MC, Yamaura K, Nishimura H, Murphy CP, Provencher CMT

- This benchtop study compared cartilage thickness and radius of curvature between the native glenoid, distal tibial allograft (DTA), and subtalar allograft (STA).
- The STA demonstrated cartilage thickness comparable to DTA and a similar radius of curvature to the native glenoid in both long and short axes.

JRF ORTHO TAKEAWAY:

These findings further support DTA as an excellent option for anatomic glenoid reconstruction and suggest the talus/subtalar joint may serve as a viable alternative, particularly when both glenoid bone loss and humeral head lesions require reconstruction.

Combined Distal Tibia and Talus Allograft Reconstruction of Bipolar Glenoid and Humeral Head Bone Loss for Recurrent Anterior Shoulder Instability

Arthrosc Tech. 2025 May

Kanakamedala AC, Cole R, Dickinson NJ, Whalen RJ, DeINegro S, McKeeman J, Kruckeberg BM, Provencher MT

- This technique outlines a surgical approach for recurrent anterior shoulder instability with bipolar bone loss. Distal tibia allografts (DTA) are an established option for restoring glenoid bone loss; however, large Hill-Sachs lesions require concomitant humeral head reconstruction.
- Talus allografts offer a readily available osteochondral solution for addressing substantial Hill-Sachs defects, allowing for an anatomic, cartilage-bearing reconstruction.

JRF ORTHO TAKEAWAY:

Due to the technical challenges and limited availability of upper-extremity osteochondral allografts, talus and distal tibia allografts provide practical, readily available alternatives for surgeons treating combined glenoid bone loss and Hill-Sachs lesions in complex shoulder instability cases.

2025 Q1–Q2 Q2 DISTAL TIBIA AND TALUS UPDATE

Hemitalus Allograft Transplantation for Osteochondral Lesions of the Talus*Video J Sports Med. 2025 Dec*

Pottanat PJ, George K, Ashy C, Kandadai J, Scott DJ, Gross CE

- This technique video demonstrates treatment of a large osteochondral lesion of the talus using a hemi talus allograft via a standard anterior approach, restoring native talar cartilage and bone anatomy.

JRF ORTHO TAKEAWAY:

Large osteochondral talar lesions remain challenging to treat; hemi talus allografts offer a viable alternative to standard talar OATS for larger anterior defects.

Advancement in Care Through Applied Translational and Clinical Research in Anterior Shoulder Instability: Military Contribution Over 25 Years: Kappa Delta Award*J Am Acad Orthop Surg. 2025 Dec*

Provencher MT, Hurley ET, Tokish JM, Owens BD, LeClere LE, Sheean AJ, Patzkowski JC, Waltz RA, Parada SA, Dickens JF

- This review article combines 25 years of work led by Dr. Matthew Provencher and colleagues, showing how the management of anterior shoulder instability has continuously adapted based on translational and clinical research. A great piece on where the field is today, and how it got here.

JRF ORTHO TAKEAWAY:

This article reinforces the clinical foundation supporting distal tibia allograft use for glenoid bone loss, citing many of the landmark studies that established its role in shoulder instability care.

New Technique for Humeral Head Grafting in the Treatment of Large Off-Track Hill-Sachs Lesions: A Case Report*JBJS Case Connect. 2025 Dec 9*

Omurzakov A, Apostolakos JM, Aftese E, Ruzbarsky JJ, Lee JT

- This case report describes a novel posterolateral approach for treating large off-track Hill-Sachs lesions, allowing humeral head reconstruction with a press-fit osteochondral allograft plug while preserving the subscapularis tendon and restoring native anatomy.

JRF ORTHO TAKEAWAY:

JRF Ortho remains committed to supporting surgeons with a comprehensive range of allograft options to optimize patient care. For surgeons utilizing this technique, JRF Ortho offers precut osteochondral cores in 10, 12, 16, and 20 mm diameters, helping streamline allograft preparation and improve operating room efficiency.