

Arthroscopic Repair of a Fascia Lata Labral Reconstruction Allograft Limb Detachment

Nicole D Rynecki, Sehar Resad-Ferati, Allison Morgan, Andrew Sheng Bi¹, Dylan T Lowe, Thomas Youm

¹NYU Langone Health, Department of Orthopedic Surge

Background

Surgical techniques for the management of labral damage have evolved alongside appreciation of labral anatomy and function. Labral reconstruction is a recent advancement that can help restore labral function with the use of autograft or allograft in the revision and primary setting in patients with diminutive, degenerative, calcified, damaged, or irreparable labral tissue. Based on several systematic reviews and meta-analyses, complications after allograft labral reconstruction are very low and mainly are associated with a risk of hip arthroscopy in general rather than labral reconstruction specifically.

Purpose

This video demonstrates arthroscopic repair of fascia lata labral reconstruction allograft limb detachment, which is a rare complication of labral reconstruction.

Methods

The anatomy of, pathogenesis of, and treatment options for hip labral tears are reviewed, with specific attention paid to labral reconstruction. The case presentation of a 23-year-old woman with pain after labral reconstruction is reviewed. Arthroscopic labral repair failed 5 years ago, and the patient subsequently underwent labral reconstruction with the use of fascia lata allograft. The postoperative course was complicated by iliopsoas tendonitis and then concerning mechanical symptoms. MRIs obtained 5 months postoperatively showed detachment of the anteroinferior-most portion of the graft from the acetabulum, with extension into the joint space adjacent to the lateral iliopsoas tendon. After a thorough discussion of the risks, advantages, and prognosis, the patient elected to proceed with revision hip arthroscopy for confirmation of diagnosis and treatment via débridement, if small and contained, graft repair, if salvageable, or revision segmental labral reconstruction.

Results

Prior labral allograft reconstruction resulted in good healing anterolaterally between the 11-o'clock and 12:30-o'clock positions; however, the anterior tip of the graft was detached from the acetabulum. The graft was salvageable. A 1.4-mm polyether ether ketone suture anchor was placed anteriorly on the acetabular rim. Suture from the anchor was passed through the anterior labral graft tissue with the use of a suture passer. After this was completed, the knot was securely tied to fix the graft anteriorly. Posteriorly, the graft had some fraying and instability, with associated chondral delamination from the 10-o'clock to 11-o'clock positions. Suture tape was passed through the posterior end of the graft and secured to the acetabular rim with the use of one 2.9-mm biocomposite suture anchor for augmentation. The postoperative course was complicated by continued iliopsoas tendonitis, which was successfully managed via physical therapy modification and ultrasonography guided corticosteroid injection. MRIs obtained 3 months postoperatively showed an intact graft in good position. At 6 months postoperatively, the patient's pain and range of motion had improved.

Conclusion

In patients with pain after labral reconstruction, surgeons must identify mechanical symptoms combined with impingement signs because these are concerning and distinguish them from extra-articular pathology, such as iliopsoas tendonitis. 3-Tesla MRI can be performed to correctly identify graft limb detachment with displacement into the joint. If the tissue is salvageable, single limb detachment can be successfully repaired with the use of suture anchors during revision hip arthroscopy with good clinical outcomes.