

Technical Note

The Posterior-Medial Portal

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Abstract: Repair of the posterior superior labrum usually involves placing an anchor posterior to the biceps attachment through an anterior-superior or Wilmington portal. Access to the posterior-superior labrum can be accomplished by establishing a portal medial to the posterior viewing portal. The initial posterior arthroscopic viewing portal is established slightly lateral to a traditional position to allow viewing of the posterior labrum and maintain separation from the posterior-medial portal. The suture anchor can be placed behind the biceps attachment through an anterior portal. The posterior-medial portal is started approximately 3 cm medial to the viewing portal with an 18-gauge needle. The needle is directed anterolateral into the intra-articular space under arthroscopic visualization to determine the appropriate course of the suture retriever. The needle is replaced with a sharp suture retrieval device. The suture from the anchor is pulled through the labrum to achieve a simple or mattress type repair. The suture is retrieved through the anterior-superior portal by finding it medial to the labrum. The sutures can be tied through the anterior-superior portal. The posterior-medial portal can be safely established with attention to technical considerations. **Key Words:** Portal—Posterior medial—Penetrator—Wilmington portal—Labrum.



FIGURE 1. The needle is directed anterolateral into the intra-articular space under arthroscopic visualization to determine the proper path for the suture retriever. The labrum is penetrated with the suture passing device to retrieve the suture.

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Repair of the posterior superior labrum of the shoulder usually involves placing an anchor posterior to the biceps attachment through an anterior-superior or trans-supraspinatus (Wilmington) portal. Passage of the sutures through the labrum can be difficult through the anterior-superior portal, yet the Wilmington portal has the disadvantage of working through the supraspinatus tendon. This report describes a posterior portal that will allow suture passage through the posterior-superior labrum while also viewing with the arthroscope posteriorly.

DESCRIPTION OF PROCEDURE

Methods of access to the posterior-superior labrum are accomplished by establishing a portal medial to the posterior viewing portal. The portal is established as follows:

The initial posterior arthroscopic viewing portal is established approximately 1 to 2 cm lateral to a traditional position to allow viewing of the posterior labrum and to maintain separation from the posterior-medial portal. The suture anchor is placed behind the biceps attachment through an anterior-superior portal. The posterior-medial portal is started approximately 3 cm medial to the viewing portal with an 18-gauge spinal needle. The needle (Fig 1) is directed antero-lateral into the intra-articular space using arthroscopic visualization.

The needle is positioned intra-articularly medial to the labrum and passed through the labrum to determine the optimal direction and position for suture passage (Fig 2). The needle is then replaced with a sharp suture retrieval device (Fig 1). The suture from the anchor is pulled through the labrum to achieve a simple or mattress type repair. The suture is retrieved through the anterior-superior portal by finding it medial to the labrum. The sutures are tied through the anterior-superior portal.

On a technical note, it is helpful to initially pass the suture device intra-articularly in a lateral direction to avoid the spinoglenoid notch and the suprascapular nerve within it. This method of passing the suture allows arthroscopic visualization of the suture-passing device as it is repositioned within the intra-articular space medial to the labrum before penetrating the labrum. Using the 2-step passage of the suture device assists in finding the suture after it is pulled through the labrum. The sutures are re-

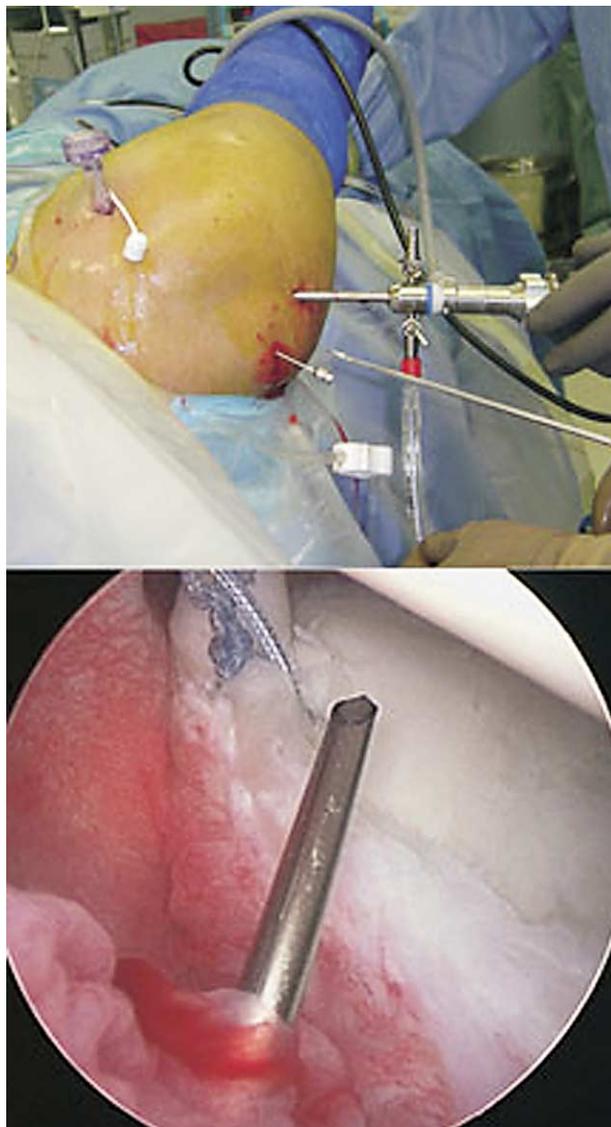


FIGURE 2. The needle is directed intra-articularly from medial to lateral to determine the path for the suture passer. The relationship of the suture retriever to the arthroscope is shown.

trieved through the anterior-superior portal and tied (Fig 3).

Cadaver dissection in 5 specimens showed the posterior-medial portal to enter the joint approximately 2 cm lateral to the spinoglenoid notch and the suprascapular nerve within it. Cadaver dissections by Anbari et al.¹ showed the scapular nerve to lie approximately 1.8 to 1.9 cm medial to the glenoid edge. The needle is directed laterally at an approximately 55° angle to the scapular spine (Fig 3).

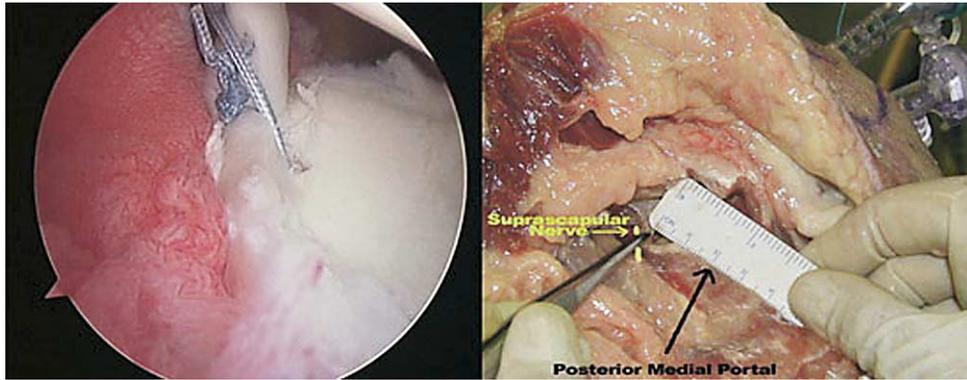


FIGURE 3. The knot is tied through the anterior-superior portal. The arrow represents the course of the suture device in relationship to the suprascapular nerve and spinoglenoid notch (forceps holding spinoglenoid septum). Note that the portal is started directly superficial to the spinoglenoid notch but then is directed laterally to the labrum to avoid the suprascapular nerve.

DISCUSSION

The posterior-medial portal can be a useful adjunct to traditional portals for suture passage posterior to the biceps tendon. The posterior medial portal can be safely established with attention to technical considerations.

REFERENCE

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