

**CASE REPORT**

# Intra-articular Ganglion Cyst of the Long Head of the Biceps Tendon Originating from the Intertubercular Groove

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*Research performed at Hamedan University of Medical Sciences, Hamedan, Iran**Received: 7 June 2014**Accepted: 6 August 2014***Abstract**

Ganglion cysts commonly occur around the shoulder, mostly in the spinoglenoid and suprascapular notches. We report a very rare case of intra articular Ganglion cyst of the long head of the biceps tendon that originated from the bicipital groove as a rare cause of shoulder pain.

**Key words:** Ganglion cyst, Intraarticular, Long head of biceps tendon, Shoulder

**Introduction**

Ganglion cysts commonly occur around the shoulder and are mostly found in the spinoglenoid and suprascapular notch (1-7). Only one patient with a ganglion cyst of the long head of the biceps tendon that originated from the labral side of the intraarticular tendon has been reported (5). In this study we report an unusual case of intraarticular ganglion cyst of the long head of the biceps tendon that originated from the tendon in the bicipital groove.

**Case report**

A 52-year-old male presented with a complaint of shoulder pain that began about a year ago. He was treated with analgesics (NSAID) and physiotherapy before being referred to our center. On physical examination, atrophy of the muscles around the shoulder was not observed, but impingement tests were positive. There was no significant weakness in the rotator cuff muscles on the affected side and anteroposterior (AP) and lateral scapular views were normal. On magnetic resonance imaging (MRI) we noticed a cyst of the biceps tendon in the intertubercular groove that extended into the shoulder joint (Figure 1).

In order to accurately diagnosis and treat the patient

shoulder arthroscopy was performed using standard posterior and anterior portals. From the posterior portal, a fusiform mass parallel and adjacent to the long head of the biceps tendon was observed (Figure 2A). By following the fusiform mass, it was determined that it originated from the tendon at the bicipital groove (Figure 2B). In addition, there was a small tear in the anterior part of the supraspinatus tendon adjacent to the cyst (Figure 2C). As the cyst was decompressed (by an 18 gauge needle) and resected (Figure 2D), leakage of viscous clear fluid of the cyst was observed, and hence the cyst was completely resected, which also included its origin in the bicipital groove and all of the tissues were sent for pathological exam. A small supraspinatus tear which was also observed was repaired using an anchor suture. Post operative care included a standard protocol for a small (<1cm) rotator cuff tear repair. At 12-month follow-up the patient was pain free and showed normal range-of-motion in the affected shoulder.

**Discussion**

MRI has been extensively used for the diagnosis of shoulder problems and hence, the detection rate of ganglion cysts around the shoulder has also

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Figure 1. Magnetic resonance imaging T2, showing the ganglion cyst in the intertubercular groove.

increased (1-4, 7, 8). They are mostly located at the spinoglenoid and suprascapular notches and may cause suprascapular nerve entrapment (2). Only one case of ganglion cyst of the long head of the biceps has been reported, which originated from the labral side of the tendon (5). This reported case is unique because it originated from the long head of the tendon in the bicipital groove. In addition, the patient had a small tear in the supraspinatus tendon and the tear was anterior, exactly adjacent to the long head of the biceps. Our findings suggest that the symptoms of the cyst may have been induced or aggravated by the supraspinatus tear.

The bicipital intertubercular groove very rarely serves as the origin of an intraarticular ganglion cyst of the long head of the biceps tendon, which may cause shoulder pain and even may induce or aggravate an anterior supraspinatus tear.

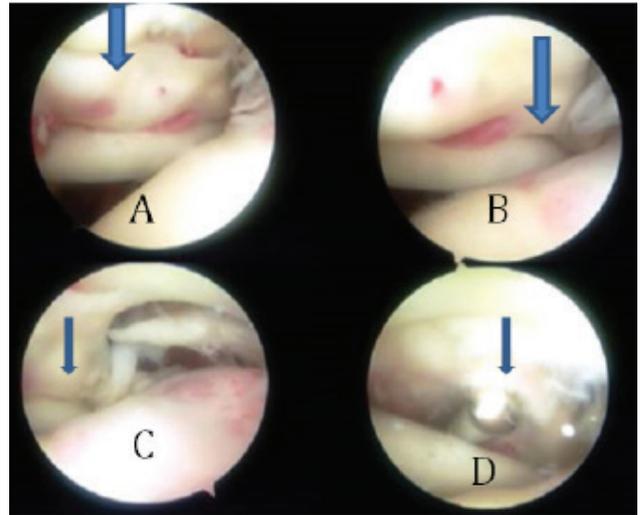


Figure 2. Arthroscopic view, A: Intraarticular extension of the ganglion cyst parallel to the biceps tendon. B: Origin of the cyst from the tendon biceps tendon at the intertubercular groove. C: Small supraspinatus tear exactly adjacent to the cyst. D: Shaving of the cyst after decompression.

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