



Teres Ligament Ganglion in the Hip Joint. Case Report

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Abstract

Injuries to the round or teres ligament of the hip, also called the ligamentum capitis femoris, are being diagnosed more and more frequently. We report location of a round ligament ganglion in the hip joint that has not been previously published.

Keywords: Hip; Arthroscopy; Teres Ligament

Introduction

Cystic lesions in the hip region are usually asymptomatic and can be found incidentally on medical imaging examinations such as computed tomography and magnetic resonance imaging and they can become symptomatic due to the compression they cause in the adjacent structures. Treatment depends on symptoms, location and size. We report a case of a patient with an anterior hip labral tear and an associated ganglion cyst arising from the round or teres ligament. As far as we know this is the first report of this ganglion location.

Case Report

A 22-year-old woman came to our clinic complaining of 6-month dull pain in her right buttock and inguinal area that worsened with walking and standing and with hip flexion and abduction movements. Stressing the adductor muscles of the hip and flexion increased her discomfort. She had a full range of hip movement. Medical image showed a cross over sign and subspine impingement in a nonarthritic joint with an alpha angle of 48°. Magnetic resonance imaging showed, an increase in the thickness and signal

intensity of the round ligament, associated with an intrasubstance cystic image of 17 mm x 10 mm, compatible with intrasubstance ganglion and mucoid degeneration without signs of discontinuity of the ligament fibers that would suggest rupture of the ligament. (Figure 1-4). Additionally, a chondrolabral rupture of 12-2 was visualized. Hip arthroscopy was performed under combined anesthesia (spinal and general) in supine position with anterolateral, medial oblique and distal anterolateral portals and all inside technique with maximum capsular preservation. Decompression of the subspine area, labral suture with 3 Iconix (Stryker®) type anchors, bump excision and capsule closure were performed. The removal of the ganglion was performed in a simple way with the help of a shaver and radiofrequency under direct arthroscopic vision. The patient was discharged the following day and followed the usual post-operative rehabilitation of labral repair and osteocondroplasty with assisted loading with crutches, circumduction movements and stationary bicycle. The patient had no postoperative complications. In the one-year follow-up, there were no recurrences of the ganglion, with complete disappearance of symptoms and no pain in her hip.

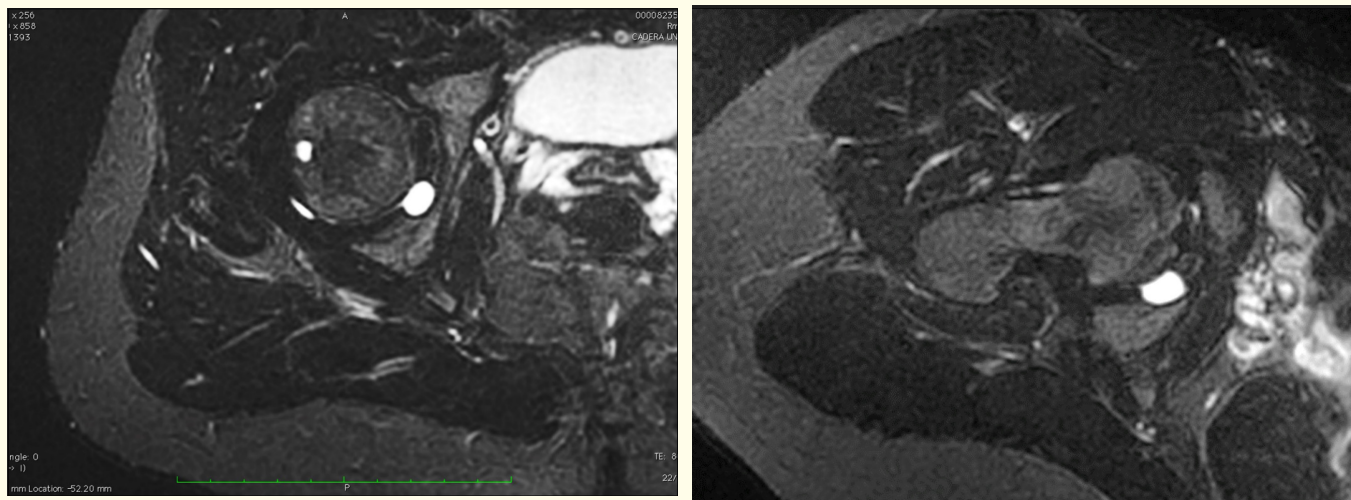


Figure 1-2: Magnetic resonance imaging showing a cystic lesion of 17 mm x 10mm arising from the teres ligament. A ganglion cyst was suspected.

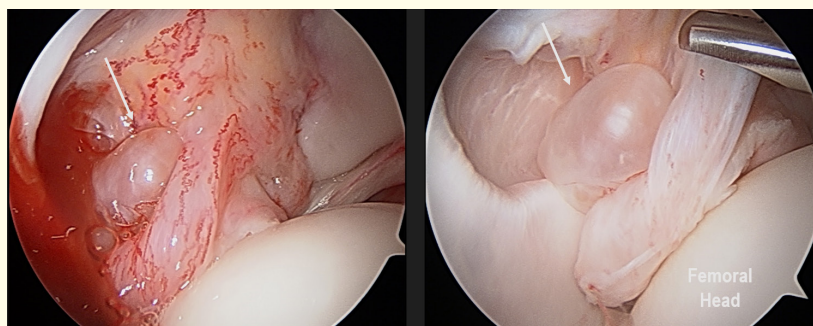


Figure 3: Right hip. Arthroscopic view of the ganglion (White arrow).

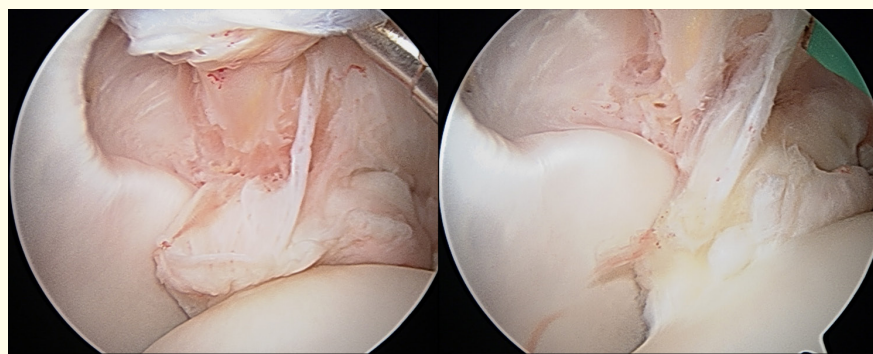


Figure 4: Arthroscopic view after debridement and removal of the ganglion.

Discussion

Ganglion cyst can appear in any tissue that is susceptible to a degenerative process and may not cause symptoms. The round or teres ligament, like the anterior cruciate ligament, can also undergo degenerative changes. Generally, patients with ganglion located intra-articularly in the hip present clinically with pain in the groin or thigh due to altered regional biomechanics [1-6]. Injuries to the round or teres ligament, better called ligamentum capitis femoris, are being diagnosed more and more frequently, fundamentally due to the use of sophisticated imaging techniques such as magnetic resonance imaging and advances in hip arthroscopy [7-9]. There is no specific clinical test to evaluate this ligament so imaging is very important to diagnose its pathology. These injuries are considered a possible cause of pain and mechanical symptoms in the hip, as well as a possible relationship with joint microinstability, appearing in some series as the third cause of intra-articular pathology in athletes [10]. If anomalies are found in this ligament, surgery is recommended and the main method of treatment is hip scope [11].

Rest, the use of nonsteroidal anti-inflammatory medication, needle aspiration, or surgical removal are the treatments of choice in cases of symptomatic cystic lesions. In our case, surgical removal was considered given the association of labral rupture and the intra-articular location in the deep central portion.

Conclusion

The increasingly frequent recognition of round, teres or ligamentum capitis femoris injuries as a possible cause of hip pain has recently allowed for better therapeutic management specially in athletes. The better understanding of this ligament anatomical features and the imaging evaluation of the lesions may contribute to improve diagnosis prior to the arthroscopy. As far as we know this is the first report of a ganglion arising from the ligamentum capitis femoris or teres ligament associated with an anterior labral tear of the hip.

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