



A Peritrochanteric Diseases Management Technical Note

Dante Parodi^{1*}, Carlos Tobar², Joaquin Lara² and Maria Jesus Haydar³

¹Department of Orthopedics and Traumatology, Hip and Pelvis unit, Fundacion Medica San Cristobal Santiago, Region Metropolitana, Chile

²German Clinic of Santiago, Chile

³Universidad Austral de, Chile

Abstract

Peritrochanteric diseases are recurrent cause of lateral hip pain that usually affects middle age and active women. Despite of questionable results, classically they have been managed in a conservative manner. Surgical techniques are reserved for those who had unsatisfactory results with conservative treatment. In a prospective case series of thirty-five patients we developed arthroscopic surgical treatment that included among the bursa resection, the release of the iliotibial band. 97% of the patients showed satisfactory results. In this article we describe our surgical approach and the middle term follow-up results.

Keywords: Hip preservation; Hip arthroscopy; Hip scope; Lateral hip syndrome

Introduction

With the development of hip arthroscopy, more attention has been focused on peritrochanteric diseases. Despite to the questionable results, classic treatment options include therapeutic exercise, physical modalities, several corticosteroid injections, extracorporeal shock wave therapy, and regenerative injection therapies [1,2]. In a case series of thirty-five patients with peritrochanteric disease, we developed surgical treatment, and 97% of them showed satisfactory results. In this article we describe our surgical approach and our middle term follow-up results.

Peritrochanteric diseases can be divided in two large groups: Lateral coxa saltans (snapping hip) and Greater trochanteric pain syndrome.

Lateral coxa saltans (Snapping hip)

Corresponds to a clinical situation in which young patients, between 15 and 25 years old and 9/10 times women, have sliding of tensor fascia lata over the greater trochanter in a voluntary or involuntary form. This snapping occurs when the standing patient makes lateral movement of the hip, an adduction of the extremity, and most the time during internal rotation. At this moment, the fascia lata goes abruptly from the anterior to posterior position in relation to the greater tochanter, making a visible snapping in the lateral face of the hip. Sometimes, it is accompanied by a clear snapping sound.

For these patients, initial management includes physiotherapy, exercise, massage therapy, and stretching techniques for the fascia. In some situations steroid injections also can be used, though it is not recommended to repeat them more than 2 times.

In those patients that conservative treatment fails, surgery to release the fascia is proposed. There are multiple surgical techniques for this procedure [3]. The technique that we use is explained as follows.

Iliotibial band release

Technical iliotibial band release from inside to outside: If the procedure is associated with arthroscopy of the medial compartment, we place the patient in supine position over an orthopedic traction table; if not, we place the patient over an operating radiolucid table; so the greater trochanter is identified using the mid-superior and mid-inferior peritrochanteric portals (Figure 1A) [4].

A 70° optic camera is used through the lower portal, crossing the fascia lata in this step to enter in the peritrochanteric space. Once



Figure 1A: Peritrochanteric portals.

inside, we proceed to infiltrate the space with saline solution to distend it. After this, the superior portal is performed, first by inserting a needle guide until it is visible (Figure 1B), and second by expanding the portal with the dilators and introducing an electrosurgical system to clean the peritrochanteric space [5,6].

Once the peritrochanteric space is clear, an hypertrophic bursa may be present and must be removed. Anatomical points to be repaired are identified: greater trochanter, vastus lateralis, and the area of insertion of the gluteus maximus posterior to the vastus lateralis (Figure 2).

Having identified the (lateral) fascia lata, we proceed to mark reference points for the cruciform fasciotomy (Figure 3). The reference points are then joined to perform a fasciotomy, first completing the

***Corresponding author:** Dante Parodi, M.D, Department of Orthopedics and Traumatology, Hip and Pelvis unit, Fundacion Medica San Cristobal Santiago, Region Metropolitana, Luis Pasteur 5259, Vitacura, 7700690, Santiago, Chile, Tel: 56 2 227549595; Fax: 56 2 227549595; E-mail: danteparodi@gmail.com

Received May 31 2015; Accepted July 20, 2015; Published August 05 2015

Citation: Parodi D, Tobar C, Lara J, Haydar MJ (2015) A Peritrochanteric Diseases Management Technical Note. Orthop Muscular Syst 4: S001. doi:10.4172/2161-0533.1000S001

Copyright: © 2015 Parodi D, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

horizontal/longitudinal portion, followed by the vertical portion. This procedure is performed using radiofrequency and/or an arthroscopic scalpel.

Care should be taken to carry out correct hemostasis to avoid post operative hematoma. Rehabilitation begins the day of surgery, with physical therapy that lasts for about 3-6 weeks depending on the patient response.

Greater trochanter pain syndrome

Frequent diagnoses include myofascial pain, trochanteric bursitis, tendinosis and rupture of the gluteus medius and minimus tendon. Furthermore, nerve entrapment like the piriformis syndrome must be considered.

Diagnosis of these pathologies is clinical, using imaging, typically HD resonance of the hip. Gluteus medius and minimus injuries, and bursitis share common symptoms of pain in the lateral aspect of the hip, with pain radiating towards the lateral thigh, and into an ill-defined posterior gluteal zone [7,8]. An important clinical difference of gluteus medius injuries, where the insufficiency to be monopodal, produces a Trendelenburg gait after a few seconds of being in this position (20-30 sec.).

Resonance will distinguish between these similar clinical pathologies.

Their management is initially conservative, but patients who do not respond should consider surgical options [9]. In cases of bursitis (most frequent), surgical treatment includes arthroscopic resection of the bursa and the opening of the Iliotibial band longitudinally, similar to the coxa saltans. Because the technique is similar, we do not describe it here.

In the case of an injury to the tendon of the gluteus medius, it must be repaired, and can be identified at the time of exploration. The arthroscopic technique used is similar to that used with the coxa saltans when entering the peritrochanteric space. Once the gluteus medius injury is identified (Figure 4), we proceed to move it distally to its original position, and fix it with a suture technique that uses two-track anchors (Figure 5). Post operative management of the reattachments includes the use of a hip orthosis and keeping heavy weight of the extremity for at least 6 weeks.



Figure 1B: The superior portal is performed, first by inserting a needle guide.

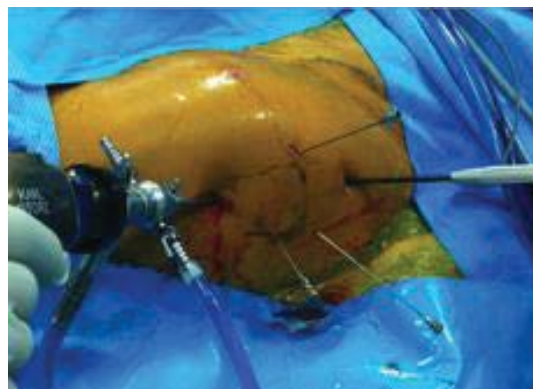


Figure 2: Reference points for the cruciform fasciotomy.

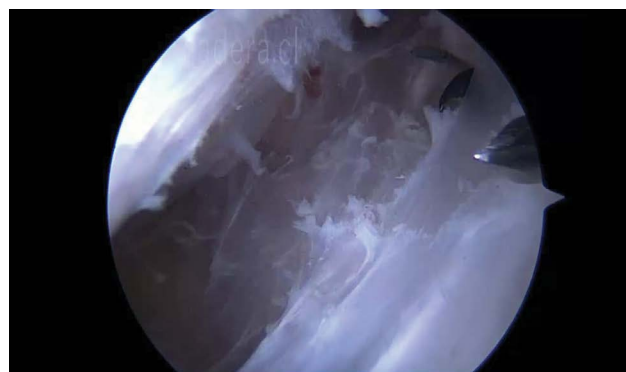


Figure 3: Completing the horizontal/longitudinal portion, followed by the vertical portion.



Figure 4: Gluteus medius injury identification.

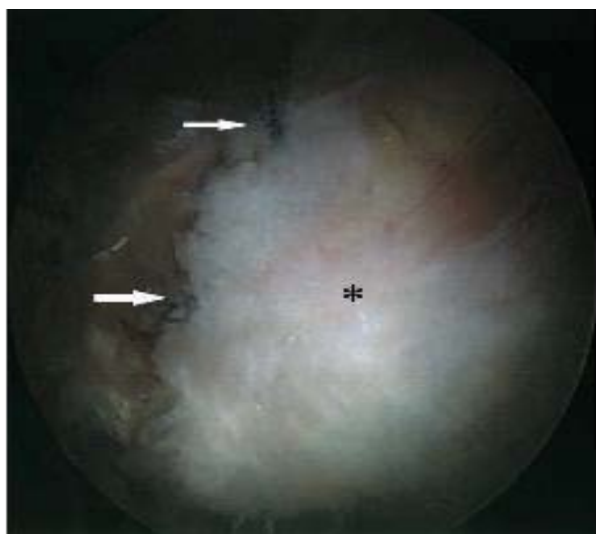


Figure 5: Gluteus medius fixing with suture with two-track anchors.

References

1. Brinks A, van Rijn RM, Willemsen SP, Bohnen AM, Verhaar JA, et al. (2011) Corticosteroid injections for greater trochanteric pain syndrome: a randomized controlled trial in primary care. *Ann Fam Med* 9: 226-234.
2. Shbeeb MI, O'Duffy JD, Michet CJ Jr, O'Fallon WM, Matteson EL (1996) Evaluation of glucocorticosteroid injection for the treatment of trochanteric bursitis. *J Rheumatol* 23: 2104-2106.
3. Ilizaliturri VM Jr, Villalobos FE Jr, Chaidez PA, Valero FS, Aguilera JM (2005) Internal snapping hip syndrome: treatment by endoscopic release of the iliopsoas tendon. *Arthroscopy* 21: 1375-1380.
4. Smart LR, Oetgen M, Noonan B, Medvecky M (2007) Beginning hip arthroscopy: indications, positioning, portals, basic techniques, and complications. *Arthroscopy* 23: 1348-1353.
5. Verhelst L, Guevara V, De Schepper J, Van Melkebeek J, Pattyn C, et al. (2012) Extra-articular hip endoscopy: A review of the literature. *Bone Joint Res* 1: 324-332.
6. Ilizaliturri VM Jr, Martinez-Escalante FA, Chaidez PA, Camacho-Galindo J (2006) Endoscopic iliotibial band release for external snapping hip syndrome. *Arthroscopy* 22: 505-510.
7. Strauss EJ, Nho SJ, Kelly BT (2010) Greater trochanteric pain syndrome. *Sports Med Arthrosc* 18: 113-119.
8. Gollwitzer H, Opitz G, Gerdsmeyer L, Hauschild M (2014) [Greater trochanteric pain syndrome]. *Orthopade* 43: 105-116.
9. Domínguez A, Seijas R, Ares O, Sallent A, Cuscó X, et al. (2015) Clinical outcomes of trochanteric syndrome endoscopically treated. *Arch Orthop Trauma Surg* 135: 89-94.

This article was originally published in a special issue, entitled: "[Musculoskeletal Physiology and Pathology](#)", Edited by Afsie Sabokbar, University of Oxford, United Kingdom