

Gluteal Tendinopathy

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Definition

In the past, lateral hip pain was thought to be caused by trochanteric bursitis, but it is now considered a secondary result of noninflammatory insertional tendinopathy of the gluteus medius and minimus (Gmed, Gmin) [1]. Both Gmed and Gmin insert onto the greater trochanter with the gluteus medius bursa beneath the Gmed tendon and medial to the greater trochanter; the trochanteric bursa is lateral to the greater trochanter. The iliotibial band composed of the tensor fascia lata and gluteus maximus tissues runs lateral to the greater trochanter. Certain motions are known to exacerbate the pain including hip adduction such as weight bearing on one extremity and crossing of the legs. These motions cause the gluteus medius and gluteus minimus along with associated bursae to be compressed by the ITB band beneath the greater trochanter insertion point [1] (Fig. 48.1). Hip flexion can also compress the tendons as the ITB fascia connects to the gluteal fascia [1].

Diagnosis

Correct diagnosis of gluteal tendinopathy requires a good history and physical exam as lateral hip pain could be referred pain from the spine or hip joint. It is important to note that the condition is most prevalent in patients over the age of 40 in both athletes and those who are sedentary and afflicts females more than males (2.5–4:1) [2]. Patients may report a history of recent falls, overuse activity, excessive weight bearing on one extremity, or recent initiation of increased physical activity [3]. Frequently patients will note exacerbation of pain with lying on the affected hip at night [5]. The onset of pain is often insidious but worsening over time.

W. Luo, MD (⋈) • A. Sohal, MD Nassau University Medical Center, Department of Physical Medicine and Rehabilitation, East Meadow, NY, USA e-mail: wluo@numc.edu; asohal@numc.edu Evaluation of the patient should focus on the back and bilateral lower extremities. It is important to examine the back as back pain may refer to the hip. Palpitation of the lateral hip will produce the pain. Provocative maneuvers should be tested. The patient is first placed in a supine position. The hip is flexed to 90° and then abducted and externally rotated (Fig. 48.2). The test is positive if the patient expresses pain with external rotation. FABERE is another provocative test, which involves flexion, abduction, external rotation, and extension at the hip (Fig. 48.3). Another important test is the single-leg test where the patient must maintain an upright trunk with single-leg stance. The position is maintained for 30 s or until pain is reproduced [4].

Differential Diagnosis of Gluteal Tendinopathy/Tears

- Bony metastasis (most common, breast, prostate, kidney, lung, and thyroid)
- · Femoral neck fracture
- Referred lumbar spine pain
- · Inflammatory diseases
- · Sciatic nerve entrapment syndromes
- Ischiofemoral impingement/quadratus femoris tear
- · Piriformis syndrome

Imaging

• Routine radiographs are used to rule out bony metastasis and osteoarthritis, but are limited in accessing soft tissue pathology. Ultrasound and MRI are two additional modalities with ultrasound having a higher positive predictive value and sensitivity [2]. Note that those without hip pain can have signs of soft tissue damage; therefore, imaging cannot be solely relied on for diagnosis. Scintigraphic studies are occasionally used to narrow the differential.

Fig. 48.1 Hip abductor muscles (Reprinted from Grimaldi [6]. With permission of Springer)

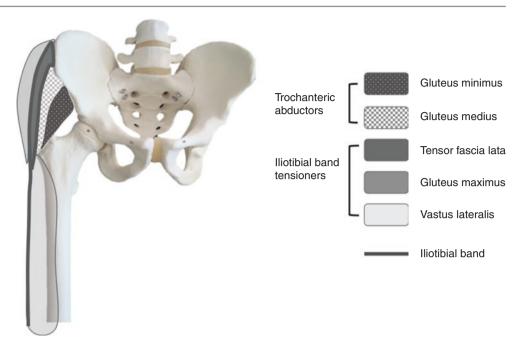




Fig. 48.2 Trochanteric pain sign (Reprinted from Mascarenhas et al. [7]. With permission of Springer)



Fig. 48.3 FABERE test performed by flexion, abduction, external rotation, and extension of the hip (Reprinted from Mascarenhas et al. [7]. With permission of Springer)

Treatment

- Treatment involves two principles: control of pain by minimizing further compression of the tendons and strengthening of the surrounding gluteal muscles.
- Current treatment includes exercise/management of tendon load, shock wave therapy, corticosteroid injection, and, in refractory cases, surgical intervention.
- The acute phase of injury requires the use of relative rest, ice, and NSAIDS.
- Effective treatment focuses on reducing tendon load.
 Patients should avoid compression of the tendon including nighttime side-lying postures. The athlete should temporarily avoid long distance running, tempo running, hill running, and plyometric drills [2].
- Exercise therapy focuses on avoidance of hip adduction movements. Instead the following movements are encouraged: hip extension and abduction in prone over pillows and single-leg stands against a wall with progression to less support as tolerated [3].
- Shock wave therapy has also been proven to be an effective therapy for gluteal tendinopathy [1].
- Refractory cases may show positive response to corticosteroid therapy in the short term, but positive responses drop in the medium and longer term [2].
- For patients that have a good but short term response to corticosteroid injections, practitioners may attempt PRP treatments, though no specific studies on gluteal tendinopathy have been reported" this should be attempted under Ultrasound guidance or Fluoroscopic guidance to assure that the injectate is being applied to the site of the tear and or attachment sites correlating to injury
- For those cases that fail conservative measures, surgery is considered. Surgery can be used to repair tendon tears and remove the trochanteric bursa or release the ITB.

Return to Play

 It is recommended that patients abstain from aggravating activities and carefully titrate exercise volume with gradual return to play.

When to Refer

Nonresponsive to conservative therapy and physical therapy

Referral

- Physiatry
- Sports medicine
- Orthopedics

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