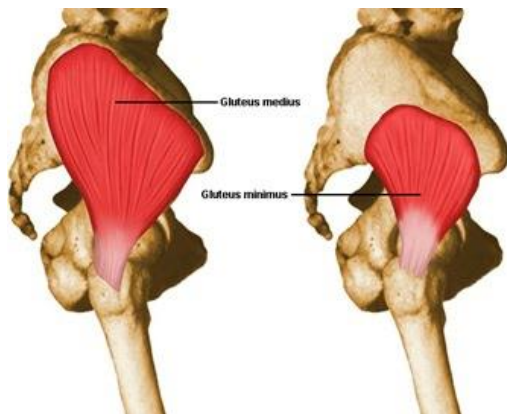


ABDUCTOR TENDON INFORMATION PAMPHLET

Greater Trochanteric Pain Syndrome (GTPS)

GTPS refers to a collection of musculoskeletal conditions that present as lateral sided hip pain. These conditions include Gluteus Medius and Minimus (Gut med/min) tendinopathy/tendinitis, Glut med/min tears (either partial or full thickness), snapping/tight Iliotibial band, osteoarthritis of the hip joint, and/or referred pain from the spine. For a long time, this lateral sided hip pain was (and still is) referred to as “Trochanteric bursitis”, however, this is an insufficient term as Trochanteric bursal inflammation is only a reactive secondary process triggered most commonly by the presence of inflamed or torn Gluteal tendons and not an independent clinical entity of its own. Therefore, the term GTPS is a more accurate description for lateral sided hip pain.



Greater trochanter

Gluteus Medius and Minimus tendons and their respective attachments on the

Symptoms:

GTPS is a common problem, with some papers suggesting that potentially 20% of people over the age of 50 are affected with this problem. The pain is often felt as a deep ache or burning sensation over the outer part of the upper thigh, which may be associated with radiation down to the knee. The pain is often worse with walking, climbing stairs and walking up hills. Another very common symptom is pain on lying on the affected side at night time which can create the greatest discomfort and concern for patients. The pain often comes on slowly over many months and often continues to deteriorate slowly with time.



the leg.

Area of pain associated with GTPS shown in red. The pain may radiate down the outer part of

The following risk factors have been associated with the development of hip bursitis:

- Repetitive stress (overuse) injury. This can occur when running, stair climbing, bicycling, or standing for long periods of time.
- Higher than ideal body mass.
- Hip injury. An injury to the point of your hip can occur when you fall onto your hip, bump your hip, or lie on one side of your body for an extended period of time.
- Spine disease. This includes scoliosis, arthritis of the lumbar (lower) spine, and other spine problems.

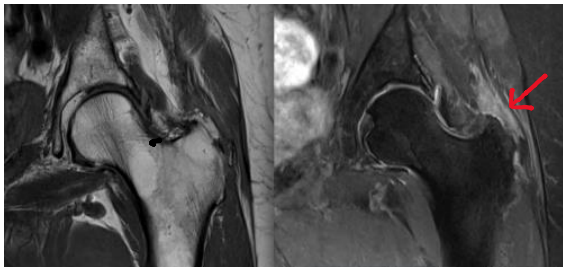
- Leg-length inequality. When one leg is significantly shorter than the other, it affects the way you walk, and can lead to irritation of a hip bursa.
- Rheumatoid arthritis. This makes the bursa more likely to become inflamed.
- Previous surgery. Surgery around the hip or prosthetic implants in the hip can irritate the bursa and cause bursitis.
- Bone spurs or calcium deposits. These can develop within the tendons that attach muscles to the trochanter. They can irritate the bursa and cause inflammation.

Examination findings:

The most common examination finding is tenderness on palpating the side of the hip where the gluteal tendons insert into the greater trochanter (GT). Other findings include limp, weakness of leg abduction (pushing the leg out to the side against resistance), and findings of tight iliotibial band (ITB).

Imaging studies:

The first line of investigation is a plain X-ray of the hip. This is a very effective and simple method for assessing the hip for the possible presence of osteoarthritis. Once clinical diagnosis of the abductor tendinitis or tear has been made and other pathologies have been ruled out, then an MRI scan is essential in accurately assessing the tendons. The MRI is very good at showing inflammation and thinning of the tendons. On top of that, it can demonstrate the presence and extent of any tears.



The red arrow shows area of high signal associated with a full thickness gluteal tear and retraction

Treatment:

1. Non-operative

As with most musculoskeletal soft tissue pains, the initial treatment of lateral hip pain secondary to Glute Med/Min tendinitis/tear consist of rest, activity modification and use of anti-inflammatory pain relief medication. As Gluteal tendon pathology is often associated with a tight ITB, early referral to physiotherapy to establish a programme of ITB stretching, eccentric gluteal strengthening, along with core and deep external rotator exercises and proprioception training, can greatly help alleviate the symptoms in the majority of cases.

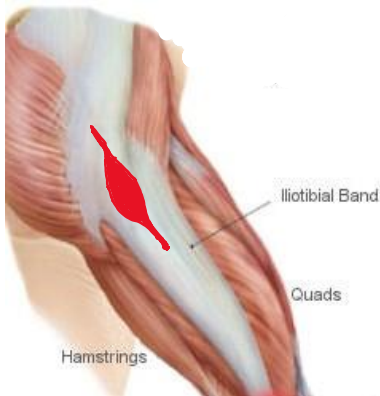
For those who continue to have pain despite the above, Platelet Rich Plasma (known as PRP) has shown great promise. PRP can be very helpful in reducing pain and improving function in cases of tendinitis/tendinopathy and in those with small asymptomatic tears. PrP, combined with physiotherapy, can help a majority of patients achieve significant improvement 6 weeks to 3month following the first injection. In some instances, a second and sometimes third injection may be needed.

2. Surgery:

In cases where a patient fails to respond to a 6 month period of non-operative treatment, surgery may be considered. There are two types of surgeries depending on the underlying pathology.

- Endoscopic ITB release and bursectomy:** This can be considered where there is no underlying abductor tendon tear. In these cases, a small camera and shaver are used through two small incisions on the side of the hip to release the ITB and remove the inflamed fibro-fatty tissue underlying it, otherwise known as the bursa. The recovery from this surgery is rather quick.

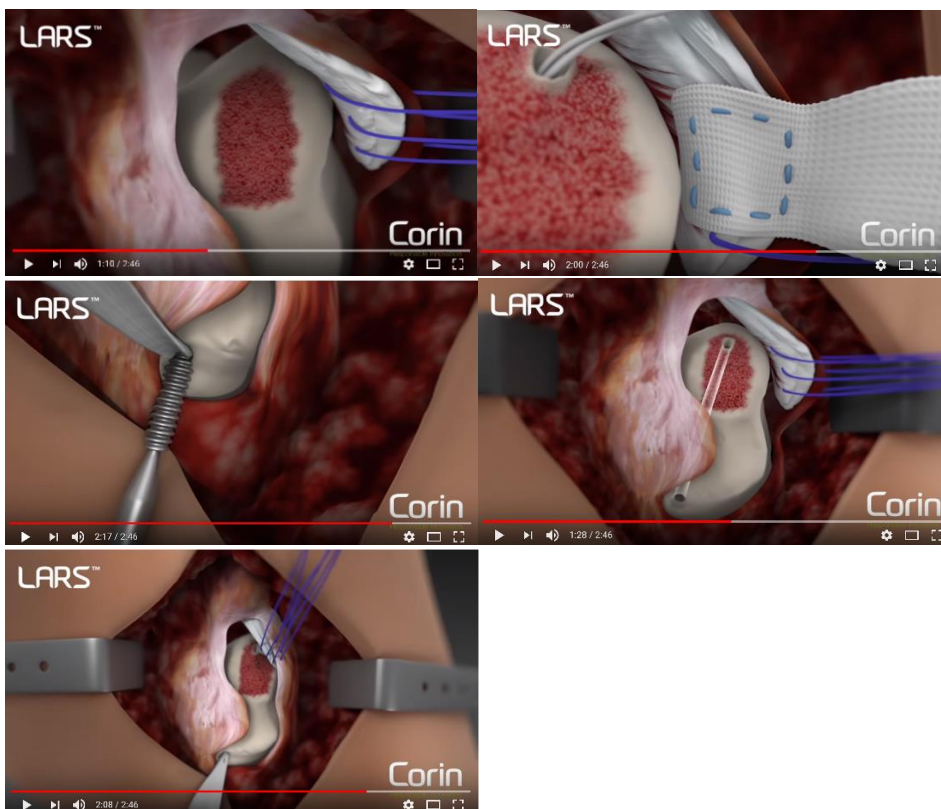
Patients are discharged the next day, weight bearing fully and often they are back to normal level of activity within 6 weeks.



The red shaded area is the portion of the ITB that is excised to take pressure off the GT and the underlying gluteal tendons

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- b. **Open augmented repair of glute med/min tendons:** In cases where there is a tear of the gluteal tendons that has failed non-operative measures, the patient may be a candidate for open augmented tendon repair. Here, a small 10cm incision is made over the GT, the torn tendon found and mobilised from the surrounding tissue. A strong synthetic mesh (LARS) is then applied and secured to the under surface of the torn tendons. The synthetic ligament is then pulled through a bony tunnel, which helps approximate the torn tendon back on its anatomic bony footprint on the GT. The LARS ligament is further secured into its bony tunnel with a large interference screw for added fixation.



Outcome of operation and its risks:

The surgery is generally very successful. A paper by Ebert et al (Hip International, 2018, Jan) followed 114 patients out to 12 months and showed significant improvement in their pain and function with 96% satisfaction rate. However, no surgery is without risk. Some of the risks specifically associated with this surgery are: failure of the repair (although very rare, 1-2%) due to poor tendon/muscle tissue, fracture of the

trochanter, infection, DVT/PE. The other important factor to remember is that surgery is not a quick fix. It does take a good 6-9 months before the majority of the pain subsides and patients start to feel the full benefit of surgery.

Following surgery, patients stay in hospital anywhere between 3-5 days. Patients can fully weight bear immediately following the surgery with two crutches for balance. Crutches are used for 6-8 weeks followed by a walking stick for a further 6 weeks. Physiotherapy starts from week 2 and continues for a further 3 months. Driving can commence at 6-8 weeks following surgery.

If you have any further queries, please feel free to contact the rooms. Thank you.



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