

Trochanteric bursitis: an overdiagnosed pathology now referred to as “Greater Trochanteric Pain Syndrome “

Trochanteric bursitis has mistakenly been the diagnosis of choice in the past years to describe any pain over the greater trochanter. Surgical, histological and imaging studies have shown that most patients who receive a diagnosis of bursitis actually have “greater trochanteric pain syndrome” (GTPS) attributable to medius and/or minimus gluteal tendinopathy or tears, thickened ilio-tibial bands (ITBs) or external coxa saltans (i.e. snapping hip) with little to no evidence of actual bursitis. Two or more of these diagnoses are often seen concomitantly. In a recent study from the American Journal of Roentgenology, in 877 sonograms of patients presenting with greater trochanteric pain, 50% had gluteal tendinosis, 28,5% had thickening of the ITB, 0,5% had a gluteal tear and 20% had trochanteric bursitis.

A proposed cause of GTPS is repetitive friction between the greater trochanter and ITB associated with overuse, trauma, and altered gait patterns. GTPS affects patients between 40 and 60 years old, and predominantly females. Likely risk factors include elevated body mass index (BMI), overuse, and abnormal hip biomechanics.

On history, patients commonly present with lateral hip pain, localized to greater trochanter, which is worse with weightbearing activities, lying on affected side at night, side-bending and prolonged sitting. Hip and back pain commonly coexist. Pain can worsen with time and be exacerbated by falls, sporting overuse such as long-distance running or unaccustomed exercise. The ability to “put on shoes” can help distinguish between osteoarthritis (unable) and GTPS (no pain or difficulty).

On physical examination, the clinician should look for a standing posture with slightly flexed hip and ipsilateral knee or listing to the contralateral side on sitting. Examination of the gait should be done to identify an antalgic or Trendelenburg gait. Direct palpation of the greater trochanter has a positive predictive value of 83% (for positive MRI findings). Provocative tests that aim to increase the tensile load on the gluteus tendons used for diagnosis are FABER, FADER (flexion, adduction & external rotation) and passive adduction. Other tests that aid diagnosis and rule out other pathologies are the dial test (for capsular laxity), Ober test, log rolling, the impingement test, the internal snapping of the iliopsoas tendon and the straight leg raise. A combination of these tests should be used to increase diagnostic accuracy.

The differential diagnosis includes hip osteoarthritis, femoroacetabular impingement (FAI), lumbar spine referred pain and pelvic pathology.

GTPS is a clinical diagnosis however in recalcitrant cases or those with unclear history or clinical findings, imaging can be used to exclude other pathologies and confirm the diagnosis. Hip X-ray is useful as first-line investigation to exclude osteoarthritis of the hip, femoroacetabular impingement (FAI) and fractures. Ultrasound or MRI of the hip is the

second-line imaging of choice as it has a high positive predictive value for diagnosis of GTPS.

Conservative treatment results in 90% improvement for patients with GTPS. The main goals are to manage load and reduce compressive forces across greater trochanter, strengthen gluteal muscles and treat comorbidities. This includes weight loss, NSAID, physiotherapy, load modification and biomechanics optimization. Referral to a Sport Medicine physician might be necessary for cases that do not respond to conservative treatment. Adjunct treatments include modalities such as shock wave therapy and the positive results usually persist for 12 months post treatment. Corticosteroid injections can be helpful in some refractory cases. Interestingly, platelet-rich plasma (PRP) injections showed clinically and statistically significant improvement in recalcitrant patients in a patient reported-outcomes study. However, more studies are needed to ascertain the impact of this treatment.

Surgical interventions are extremely rare and only for advanced refractory cases, failing optimal conservative treatments. Surgery can include minimally invasive endoscopic bursectomy, ITB and fascia lata release or lengthening, trochanteric reduction osteotomy or gluteal tendon repair. Often surgery incorporates a combination of these interventions. The functional outcomes of surgery are usually favorable.

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