

Trochanteric bursitis: misnomer and misdiagnosis

MICHAEL J. WALSH MB BS, FAOrthA

Series Editor **MICHAEL I. SOLOMON** FRACS(Orth)

Trochanteric pain of spontaneous onset in middle age is rarely due to bursitis.

Case presentation

History and examination

A 58-year-old woman presented with a three-year history of pain of gradual onset in the region of the left greater trochanter and no history of injury. This had been treated with a variety of conservative therapies, including physiotherapy and several corticosteroid injections, with little or no relief. She could not sleep on the affected side and her walking distance was limited to less than one kilometre by the pain. She was otherwise well, except for mild but well controlled hypertension.

Examination revealed a waddling gait (Trendelenburg lurch) on the left side and slight buttock wasting. There was weakness of hip abduction power, full pain-free hip mobility, and very marked tenderness over the greater trochanter.

Diagnosis

For a middle-aged woman presenting with trochanteric pain, gluteal tendinopathy must be considered along with the diagnosis of trochanteric bursitis. An x-ray of the pelvis and hip may reveal some osteophytes around the lower part of the trochanter, but was completely normal in this case. An injection of 1% lignocaine into the trochanter was notable for the needle contacting bone (rather than tendon), the lack of resistance to the plunger of the syringe (indicating that the anaesthetic was being injected into a cavity), and the immediate and complete (but short term) relief of the trochanteric pain.

MRI revealed rupture of the gluteal tendon attachments to the trochanter, especially the gluteus medius tendon (Figure 1). There was considerable fluid deep to the tendon, which was also thickened and hyperintense.

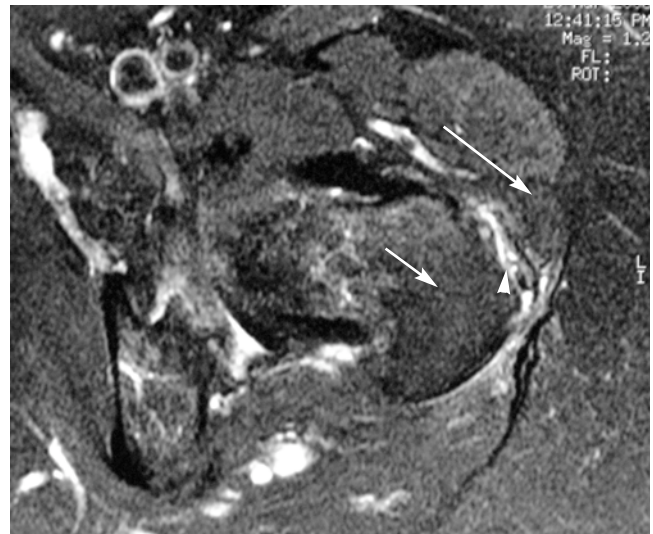


Figure 1. MRI transverse section of the greater trochanter (short arrow) showing the separation of the gluteus medius (long arrow). Synovial fluid was present between the detached tendon and trochanter (arrowhead).

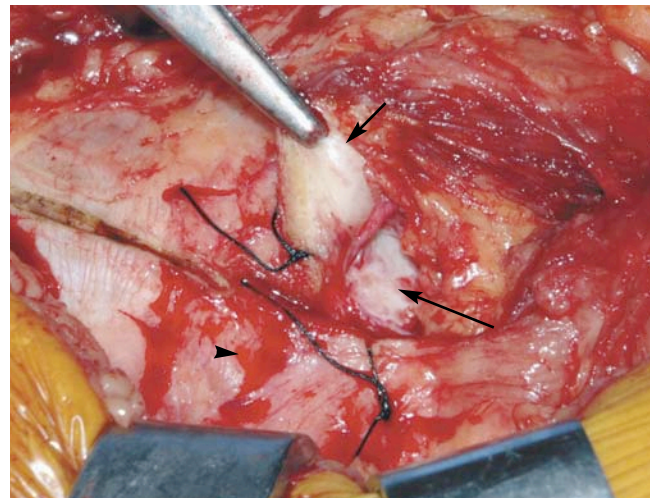


Figure 2. Dissection of the tendon reveals the point of separation of the markedly thickened tendon from the trochanter. Normally the tendon is firmly attached to the trochanter. The deep surface of the detached tendon (short arrow) and polished surface of the greater trochanter (long arrow) are shown and thin benign bursal tissue is visible (arrowhead).

Treatment

Physiotherapy and NSAIDs are the first line of treatment for trochanteric pain. A single dose of corticosteroid can be injected but should not be repeated. If the patient is symptomatically disabled and has not improved with the above modalities, surgery may be indicated.

Dr Walsh is an Orthopaedic Surgeon at Hawkesbury Hospital, Windsor, Nepean Hospital, Penrith, and No. 3 Combat Support Hospital, RAAF, Richmond, NSW. Series Editor: Dr Solomon is Visiting Medical Officer (Orthopaedics), Prince of Wales, Prince of Wales Private, Sydney Children's and Mater Misericordiae Hospitals, Sydney, NSW.

For this patient, surgical exploration of the trochanter revealed no thickening or swelling of the bursa, which was histologically normal. The actual pathology, which was a complete detachment of the gluteus medius tendon from the greater trochanter, was confirmed (Figure 2).

Histological examination of the tendon revealed extensive changes of myxoid degeneration in the tendon at the level of the detachment. An extensive dissection enabled the degenerate tendon to be debrided and the healthy remaining tendon was reattached to the trochanter. This was followed by a period of protected weight-bearing on crutches. By the 15th postoperative week the patient reported complete pain relief, unlimited walking distance and ability to sleep comfortably on the affected side.

Discussion

The incidence of trochanteric pain has been reported to be 1.8 per 1000 patients per year, with 36% remaining symptomatic after one year and 29% after five years.¹ The disorder has been described as a chronic disease in a substantial number of patients that is associated with much impairment when conducting daily activities.¹ In more than 50 gluteal tendon reconstructions, I have yet to see significant bursal disease. The complete absence of bursal pathology suggests that the true pathology is a degenerate tendon detachment or rupture.

Dramatic and substantial relief of pain results from a successful repair. The historically intractable nature of this pain – which is familiar to so many who have had to either manage this condition over the years or suffer it – is only due to the fact that traditional therapy has often been directed at the wrong pathology. If ‘trochanteric bursitis’ was renamed gluteal tendinopathy and considered in the same manner as we consider a rotator cuff tear, a clearer and more effective therapeutic approach to management could evolve.

Key points

- ‘Trochanteric bursitis’ is not actually a bursitis.
- Fluid in the bursa, which may be noted on ultrasound examination, exudes from the interval between the detached tendon and the trochanter and drains into the bursal space.
- Pain can be substantially relieved and hip function restored by repair of the tendon rupture. MT

Reference

1. Lieveense A, Bierma-Zeinstra S, Schouten B, Bohnen A, Verhaar J, Koes B. Prognosis of trochanteric pain in primary care. *Br J Gen Pract* 2005; 55: 199-204.

DECLARATION OF INTEREST: None.