

CLINICAL INQUIRIES

Evidence Based Answers
from the Family Physicians
Inquiries Network

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How should you treat trochanteric bursitis?

Evidence-based answer

Conservative measures—followed by corticosteroid injection, if necessary—are best. Conservative therapy includes rest, nonsteroidal anti-inflammatory drugs (NSAIDs), and stretching exercises focused on the lower back and sacroiliac joints (strength of recommendation [SOR]: **C**, usual practice). Patients whose symptoms persist despite conservative therapy are

likely to benefit from an injection of 24 mg betamethasone and 1% lidocaine (or equivalent) into the inflamed bursa (SOR: **B**, limited-quality, patient-oriented evidence).

In rare cases of intractable symptoms, surgical procedures such as iliotibial band release, subgluteal bursectomy, and trochanteric reduction osteotomy are options (SOR: **C**, case studies).

Evidence summary

Trochanteric bursitis is characterized by chronic intermittent lateral hip pain caused by inflammation of the trochanteric bursae. The bursae can become inflamed at the gluteus medius tendon, iliotibial tract, or gluteus minimus during repetitive flexing of the hip. Several conditions are associated with trochanteric bursitis (**TABLE**).

Trochanteric bursitis peaks in the fourth to sixth decades of life. One retrospective cohort study found the prevalence to be 1.8 cases per 1000 patients per year in primary care; 79% of cases occurred in women.¹

No studies have compared conservative treatments

Most review articles refer to initial treatment with rest, physical therapy, stretching, and NSAIDs. These treatments were described in textbooks and articles from the 1940s and 1950s.

No studies comparing conservative

treatments were found. Few reports discuss physical therapy for trochanteric bursitis.

Corticosteroid injection has the best evidential support

Corticosteroid injection for treating trochanteric bursitis is supported by the best evidence in the available literature. No controlled trials have compared injection with placebo, however.

A randomized, prospective, open comparison trial at a rheumatology clinic assigned patients with trochanteric bursitis to 6-, 12-, or 24-mg doses of betamethasone mixed with 1% lidocaine.² Seventy-seven percent of patients had improved at 1 week, 69% at 6 weeks, and 61% at 26 weeks. Notably, a significant difference was found at 26 weeks in the number of patients with sustained pain improvement who had received 24 mg of steroid ($P<.0123$) compared with patients who received the lower doses. The authors didn't report side effects

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FAST TRACK

Initial treatment includes rest, NSAIDs, and stretching exercises focused on the lower back and sacroiliac joints.

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TABLE

Conditions associated with trochanteric bursitis

Chronic mechanical low back pain
Degenerative arthritis or disc disease of lower lumbar spine
Degenerative joint disease of knees
Fibromyalgia
Iliotibial band syndrome
Inflammatory arthritis of the hip
Ipsilateral or contralateral hip arthritis
Leg length discrepancy
Obesity
Pes planus
Tendonitis of external hip rotators
Total hip arthroplasty

Source: Lievens A et al. *Br J Gen Pract.* 2005.¹

FAST TRACK

Patients whose symptoms persist are likely to benefit from an injection of 24 mg betamethasone and 1% lidocaine into the inflamed bursa.

or complications.

A prospective, noncomparative cohort study investigated 72 patients in a rheumatology clinic who hadn't improved after at least 2 weeks of treatment with NSAIDs, analgesics, or ointments.³ Of the 59 patients who consented to steroid injections, 42 improved after 1 injection of 40 mg methylprednisolone with 2 mL of 2% lidocaine, 13 improved after a second injection 3 weeks later, and the remaining 4 improved after a third injection. Improvement was defined as disappearance of pain and disability. Six patients (8%) experienced a recurrence of bursitis during a 2-year follow-up period. No local or systemic complications were associated with the corticosteroids or anesthetic solution.

Two retrospective studies also documented the efficacy of corticosteroid injection. One investigated treatment of 36 patients in a rheumatology practice.⁴ All received methylprednisolone (40-80 mg) or triamcinolone (20-40 mg), and all improved. Two thirds of the patients were symptom free after 1 or 2 injections. Symptoms usually resolved within 2 days to several months (typically 1 or 2 weeks) postinjection. About 25% of the patients relapsed within 2 years.

Another retrospective cohort study

of 164 British patients found that those who received a corticosteroid injection were 2.7 times more likely to have recovered at 5 years than patients who had not received an injection (odds ratio=0.4; 95% confidence interval, 0.1-1.0).¹

When to consider surgery

Surgical treatment may be necessary for patients with refractory trochanteric bursitis. Several case studies⁵⁻⁷ demonstrate successful outcomes with a variety of surgical techniques, including trochanteric reduction osteotomy and iliotibial band release. Newer techniques involve arthroscopic bursectomy.

Recommendations

UpToDate⁸ recommends conservative treatment initially. For persistent cases, a corticosteroid injection should be given and repeated in 6 weeks if pain persists. Surgery may be considered if these measures don't relieve symptoms and pain lasts longer than 1 year.

The American Academy of Orthopaedic Surgeons similarly recommends NSAIDs and activity modification followed by corticosteroid injection.⁹ Surgery is rarely indicated. ■

References

- Lievens A, Bierma-Zeinstra, S. Prognosis of trochanteric pain in primary care. *Br J Gen Pract.* 2005;55:199-204.
- Shbeeb M, O'Duffy D, Michet CJ Jr, et al. Evaluation of glucocorticosteroid injection for the treatment of trochanteric bursitis. *J Rheumatol.* 1996;23:2104-2106.
- Schapiro D, Nahir M, Scharf Y. Trochanteric bursitis: a common clinical problem. *Arch Phys Med Rehabil.* 1986;67:815-817.
- Rasmussen K, Fan N. Trochanteric bursitis: treatment by corticosteroid injection. *Scand J Rheumatol.* 1985;14:417-420.
- Slawski D, Howard R. Surgical management of refractory trochanteric bursitis. *Am J Sports Med.* 1997;25:86-89.
- Fox J. The role of arthroscopic bursectomy in the treatment of trochanteric bursitis. *Arthroscopy.* 2002;18:E34.
- Govaert L, van der Vis R, Marti RK, et al. Trochanteric reduction osteotomy as a treatment for refractory trochanteric bursitis. *J Bone Joint Surg Br.* 2003;85:199-203.
- Anderson B. Trochanteric bursitis. UpToDate [online database]. Version 17.2. Waltham, Mass: UpToDate; 2009.
- Trochanteric bursitis. In: Griffin LY. *Essentials of Musculoskeletal Care.* 3rd ed. Rosemont, IL: American Academy of Orthopaedic Surgeons; 2005:461-463.