

Buttock pain is most commonly seen in athletes involved in kicking or sprinting sports. It can occur in isolation or it may be associated with low back or posterior thigh pain. Diagnosis of buttock pain can be difficult as pain may arise from a number of local structures in the buttock or can be referred from the lumbar spine or sacroiliac joint (SIJ). The causes of buttock pain are shown in Table 22.1. The anatomy of the buttock region is shown in Figure 22.1.

Clinical approach

When assessing a patient with buttock pain, the clinician should attempt to determine whether the pain is local or referred. Clues can be obtained from the nature and location of the athlete's pain. Examination may then identify which of the local or the potential pain-referring structures are causing the buttock pain. Investigation is of limited usefulness in the assessment of the patient with buttock pain.

History

A deep, aching, diffuse pain, which is variable in site, is an indication of referred pain. Buttock pain associated with low back pain suggests lumbar spine abnormality. Buttock pain associated with groin pain may suggest SIJ involvement.

When the patient is easily able to localize pain of a fairly constant nature, the source is more likely to be in the buttock region itself. Pain constantly localized to the ischial tuberosity is usually due to either tendinopathy at the origin of the hamstring muscles or ischiogluteal bursitis. Pain and tenderness more proximally situated and medial to the greater trochanter may be from the piriformis muscle.

Pain aggravated by running, especially sprinting, is not diagnostic, as most conditions causing buttock pain may be aggravated by sprinting. Increased local pain on prolonged sitting may be an indication that ischiogluteal bursitis is the cause of the problem, although lumbar spine problems can be aggravated by sitting.

Table 22.1 Causes of buttock pain

Common	Less common	Not to be missed
Referred pain	Piriformis conditions	Spondyloarthropathies
Lumbar spine	Impingement	Ankylosing spondylitis
Sacroiliac joint	Muscle strain	Reiter's syndrome (reactive arthritis)
Hamstring origin	Fibrous adhesions around sciatic nerve	Psoriatic arthritis
tendinopathy	Prolapsed intervertebral disk	Arthritis associated with inflammatory bowel disease
Ischiogluteal bursitis	Chronic compartment syndrome of the posterior thigh	Malignancy
Myofascial pain	Stress fracture of the sacrum	Bone and joint infection
	Apophysitis/avulsion fracture	
	Ischial tuberosity (children)	

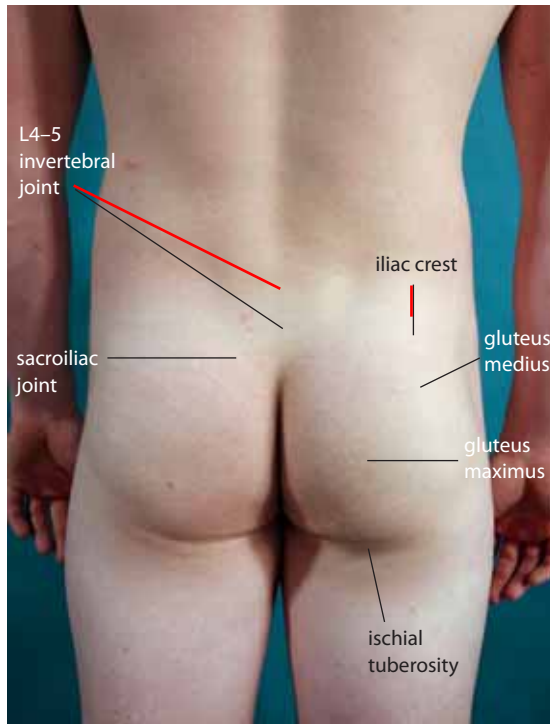


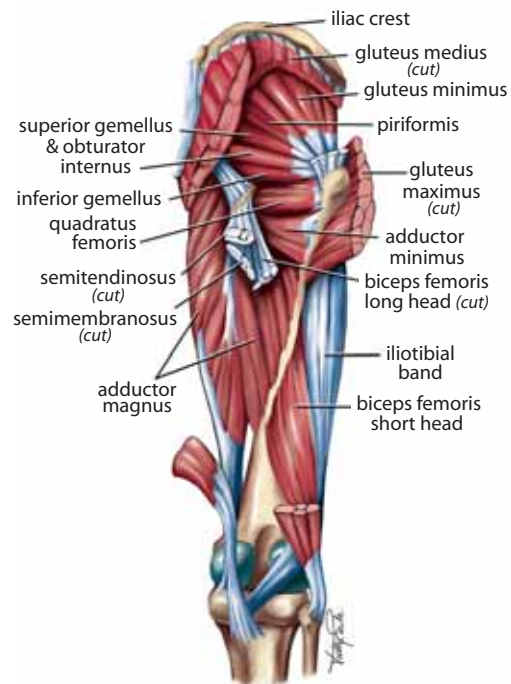
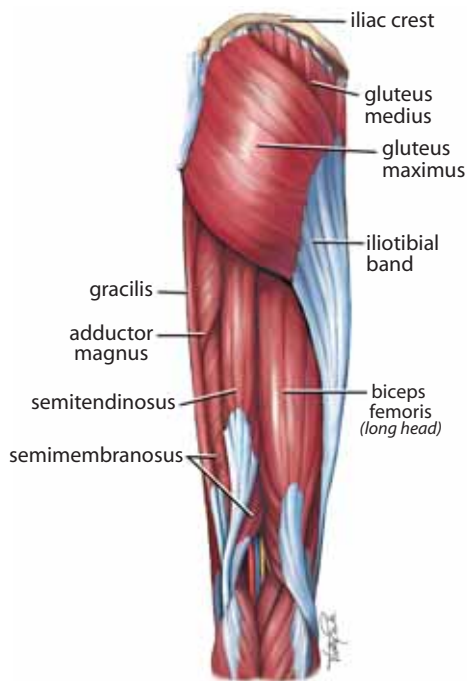
Figure 22.1 Anatomy of the buttocks
(a) Surface anatomy

The timing of the buttock pain is of importance in establishing the nature of the diagnosis. Inflammatory pains such as that experienced in sacroiliitis as part of a spondyloarthropathy are typically worst in the morning and improve with light exercise. Such ‘morning stiffness’ lasts at least 30 minutes. Other features that strongly suggest the presence of spondyloarthropathy include associated enthesopathy such as Achilles tendinopathy or plantar fasciitis and multiple joint problems.

Examination

The slump test is an important part of the examination in attempting to differentiate between local and referred pain. However, not all cases of referred pain will have a positive slump test result. The lumbar spine should always be carefully examined, particularly for evidence of hypomobility of one or more intervertebral segments.

1. Observation
 - (a) from behind (Fig. 22.2a)
 - (b) from the side
2. Active movements—lumbar spine (Chapter 21)
 - (a) flexion
 - (b) extension
 - (c) lateral flexion



(b) Muscles of the buttock: superficial (left) and deep (right)