

Acute Hip and Groin Pain

WITH CHRIS BRADSHAW AND PER HOLMICH

CHAPTER

23

Acute hip and groin pain occurs frequently in sports involving twisting and turning and kicking such as the various football codes, especially soccer and Australian football. Symptoms can arise from various structures including the adductor muscles and tendons, the hip joint and associated muscles and bursae. Careful clinical assessment usually permits an accurate diagnosis. Appropriate treatment and respect for the conditions that cause acute pain in the groin and hip region generally lead to a rapid functional recovery. Attempting to ignore symptoms or rush return to sport can lead to longstanding exercise-related hip and groin pain, which is a diagnostic and therapeutic challenge that is the subject of Chapter 24.

Clinical approach

In patients with acute hip and groin pain it is vital to localize the area of abnormality to make an anatomical diagnosis (Fig. 23.1). The most common causes of acute hip/groin pain are strains of the adductor or, less commonly, the iliopsoas muscles, or injuries to the hip joint itself, such as a labral tear and/or chondral injury.

The clinician must not overlook the less common but important causes of pain in this region, such as an intra-abdominal abnormality (e.g. appendicitis), urinary tract abnormality, gynecological abnormality and rheumatological disorders (e.g. ankylosing spondylitis). Infections such as osteomyelitis should also be considered. A list of causes of pain in this region is shown in Table 23.1.

History

The major goals of history taking in the sportsperson presenting with acute pain in the groin and hip region

are to localize the anatomical region from which pain may be arising and identify 'red-flag' conditions when they exist. The acute onset of pain strongly suggests a muscle strain. The adductor longus is the most commonly affected muscle. The localization of the pain is also important to determine which structure may be causing the pain. Hip joint trauma can cause the athlete to present soon after injury, and skeletal conditions such as stress fractures may present with either acute or insidious onset of pain.

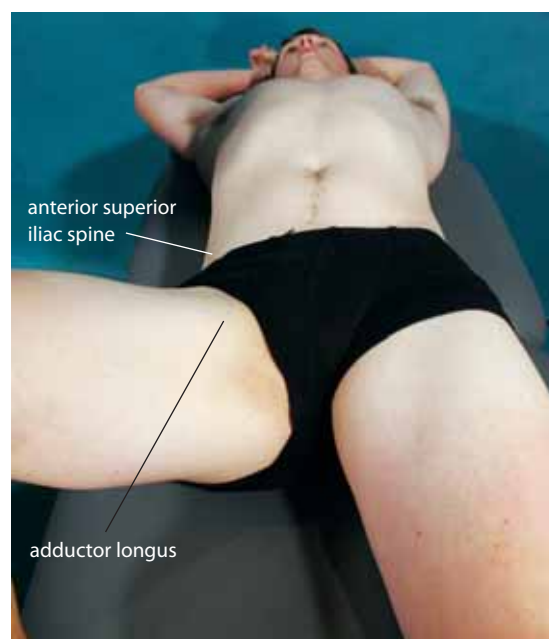


Figure 23.1 Anatomy of the hip and groin area
(a) Surface anatomy



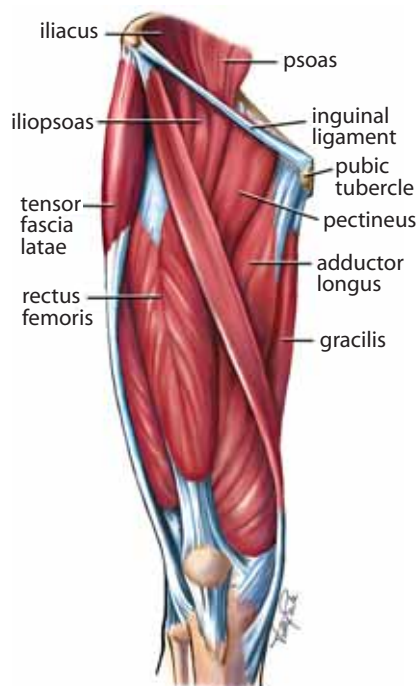
(b) Plain X-ray of the pelvis

Examination

Each region of the hip and groin that has the potential to produce pain must be examined. This includes the adductor muscles, the hip flexors and the hip joint.

Examination involves:

1. Observation
 - (a) standing
 - (b) walking (Fig. 23.2a)
 - (c) supine



(c) Muscles of the hip and groin region

2. Active movements
 - (a) hip flexion/extension
 - (b) hip abduction/adduction
 - (c) hip internal/external rotation
 - (d) circumduction test

Table 23.1 Causes of acute hip and groin pain

Common	Less common	Not to be missed
Adductor muscles	Iliopsoas strain	Slipped capital femoral epiphysis ^(a)
Muscle strain	Trochanteric bursitis	Intra-abdominal abnormality
Tendinopathy ^(a)	Stress fracture ^(a)	Appendicitis
Hip joint	Neck of femur	Prostatitis
Synovitis	Pubic ramus	Urinary tract infections
Labral tear	Acetabulum	Gynecological conditions
Chondral lesion	Referred pain ^(a)	
	Lumbar spine	
	Sacroiliac joint	
	Infection	
	Osteomyelitis	
	'Snapping' hip	
	Rectus femoris muscle strain (upper third)	
	Avulsion apophysitis/fracture	
	Anterior superior iliac spine	
	Anterior inferior iliac spine (adolescents)	

(a) Conditions that more commonly present as hip and groin pain of gradual onset but may have an acute presentation. These conditions are described more fully in Chapter 24.