

Inguinal pains in athletes – differential diagnosis and treatment

Sakari Orava

Mehiläinen Hospital, Sports Clinic and Sports Trauma Research Center, Turku

Pains and injuries at the inguinal area are relatively common in athletes. The symptoms and findings often are obscure and difficult to interpret. Inguinal pains are often very similar to pains from hip joint and differential diagnosis often difficult. The injuries and pain syndromes can be divided for example according to the affected tissues and structures.

1. Bone injuries.

Stress fracture of pubic and ischium arch. Stress fracture of femoral neck. Avulsion fracture or osteocondrosis of anterior inferior and superior iliac spine. Avulsion fracture of lesser trochanter. Osteopathia of symphysis pubis. Enthesitis calcifications.

2. Cartilage injuries.

Osteoarthritis of the hip joint. CAM and FAI. Osteochondrosis of symphysis pubis.

3. Muscle and fascial pains.

Conjoined tendon injury (sportman's hernia). Real direct or indirect hernia. Injury of the distal rectus abdominis muscle. Adductor muscle tears, scar, insertion pain, tightness. Rectus femoris insertion pain, avulsion.

4. Tendon pains.

Psoas tendinitis, psoas entrapment. Adductor tendon/muscle insertion problems.

5. Nerve pains.

Meralgia paresthetica (entrapment of n. cut. fem later.). N. femoralis pain. N. obturatorius entrapment. Problems from n. ilioinguinalis et genitofemoralis.

6. Bursal pains.

Iliopsoas bursitis. Other traumatic or overuse bursitides.

Symptoms often lead to right diagnosis. Careful, repeated clinical examination is the basis for diagnosis. Radiographs, ultrasound echography and MRI are, however usually needed. The treatment is different with different diagnoses and is conservative in most diagnoses. Rest, modified training, physiotherapy and medicines can be used. Surgical treatment has to be considered in chronic pains or big tears, avulsions or other severe problems. Numerous surgical repairs have been described and used. These include screw or plate fixation or drilling of bones, re-fixation of avulsed bone fragments or tendon – muscle insertions, excision of scars, modified hernioplasties with mesh graft (open or laparoscopic), relaxation of tendon, liberation of nerves etc. With increasing experience, proper treatment methods are found and chosen individually. Results of the surgical treatment of groin pain problems usually are good.