Quadratus femoris tendinitis as a cause of groin pain

Pieter Klinkert jr, Robert J Porte, Theo P W de Rooij, Alexander C de Vries

Groin pain can be very disabling and is often difficult to diagnose. There are many possible causes for chronic groin pain. In this case report we describe a patient with quadratus femoris tendinitis, causing disabling groin pain.

Case report
A 30 year old woman, with a history of back pain, presented with pain in her right groin. The pain was not in one spot, but in a vague area in the groin. The pain first appeared six weeks previously while lifting a box of five kilograms off the ground, with her legs besides the box. This lift entails a combined movement of extension and adduction of the hip. At work she often lifts boxes of five to 10 kilograms. For exercise she jogs and works out. She recently started a leg work out, including adduction and lateral rotation exercises. She was unable to work, because of the groin pain.

Physical examination of the right groin and hip showed no signs of herniations or other abnormalities. There were no specific tender spots. The adductor stress test seemed to provoke the symptoms. An x ray of the pelvis and lower spine showed no abnormalities. Initially the pain was diagnosed as adductor tendinitis.

There was no improvement with the six weeks of rest and treatment with diclofenac by mouth. She then had local infiltration of the adductor tendons with Depomedrol, a combination of a longacting corticosteroid (methylprednisolone) and local anaesthetic (lidocaine-hydrochloride). This treatment was repeated after two weeks.

Again there was no improvement and she had surgical exploration of the right groin to exclude a femoral herniation, without herniography preoperatively. This exploration was negative. Finally, magnetic resonance imaging of the pelvic region showed the correct diagnosis (figs 1 and 2), which was an inflammation of the quadratus femoris tendon at the insertion to the right femur. She was given an injection with Depomedrol under ultrasound guidance at the insertion of the tendon and repeated after two weeks. At the time of the injection the patient recognised the pain. After this treatment she had a gradual but complete resolution of all symptoms. The patient has now been pain free for four months and has started to work again. She has also started to jog and work out again.

Conclusion
The quadratus femoris muscle arises from the upper part of the external border of the tuberosity of the ischium and is inserted into a small tubercle of the trochanteric crest of the femur. The quadratus femoris is a lateral rotator of the thigh and helps with adduction. We think that tendinitis was caused by the recent leg work out and provoked by the lifting movement. The
reason for the pain in the groin may be that the
tendinitis was in the trochanteric region, but that
the quadratus femoris originates from the tuber-
osity of the ischium. It could be a referred pain.

To the authors' knowledge quadratus femo-
ris tendinitis as a cause of groin pain has not
been reported in the medical literature before.
There are several publications on groin pain,
especially affecting athletes.1−5 Inguinal hernia
(sports hernia), tendinitis (adductor tendons,
rectus femoris tendon, rectus abdominis ten-
don, iliotibial tendon), bursitis, osteitis, sym-
physitis, and prostatitis have been described as
causes of groin pain.

From this case we concluded that when
physical examination and herniography do not
point to the "ordinary" causes of groin pain,

Local complications of self-administered anabolic
steroid injections

Nick A Evans

Abstract
In addition to the pharmacological side
effects of anabolic steroids, complications
may also result from the injection tech-
nique used in self administration. Two
cases are presented where anabolic stero-
id injections resulted in knee joint sepsis
and radial nerve palsy.

(Keywords: anabolic steroids; injections; complications)

Intramuscular injection is a popular route of self-administering anabolic steroids to improve
athletic performance or improve body image. Ninety six per cent of steroid users in a recent study
admitted to using injectable prepara-
tions.1 This report highlights two unusual clinical complications resulting from anabolic steroid
injections, where the athletes initially chose to withhold the relevant illicit drug history.

Case reports

Case 2
A 28 year old recreational bodybuilder pre-
sented to his general practitioner with a short
history of paraesthesia over the dorsum of his
left hand. A small area of changed sensation
was identified together with mild weakness
(MRC grade 4) of left wrist extension. The
patient linked the symptoms to a left sided
neck sprain sustained while lifting weights one
week earlier. With a suspicion of cervical nerve root
compression, specialist opinion was sought.

When the patient was seen in clinic one
month later, his neurological symptoms had
resolved spontaneously. Clinical examination
failed to identify any neurological deficit in the
left upper limb, neck movements were full and
pain free. However, skeletal muscle hypertro-
phy was noted, along with the trail of physical
signs associated with anabolic steroid use,

Keywords: anabolic steroids; injections; complications

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