Supplementary file – description of the presented cases

Case 1

History

- 27 year old male amateur runner and soccer player
- Normally trains on a daily basis 3 times a week football and 3 times a week running
- No previous history of groin injuries
- Gradual onset 1st episode left sided groin pain over the past 8 weeks
- Pain located around proximal adductors and on insertion on the pubic bone
- The pain is worse on sprinting, kicking and changing directions in football and mild pain at the end of 5km runs
- Initially able to train and play without performance being affected
- Since 2 weeks pain after warming-up
- Now unable to sprint fully or kick with any power
- Past medical history: none
- Previous injury: 2 years ago lateral ankle ligament injury right side, good recovery. Several contusions that did not need medical attention
- Medically fit, no health issues
- Medication: none. No allergies

Physical examination

- General healthy athletic male. Mild varus alignment both legs
- Lumbar spine normal pain free range of motion
- Horizontal pelvis
- Hip: Normal pain free flexion. 20° internal and 50° external rotation bilaterally. No pain on FABER or FADIR test
- Inspection groin region: no swelling, bruising or scars
- Palpation: pain on palpation of left proximal adductor tendon and attachment at the pubic bone
- No pain on palpation of iliopsoas, rectus abdominus, inguinal canal/ring, inguinal ligament, conjoined tendon, other structures in the groin region.
- Resistance testing:
 - Hip adduction 0°, 45°, 90° pain felt at left adductor insertion, moderate strength
 - Hip flexion 0° and 90° no pain, good strength
 - Hip abduction 0° and 45° no pain, good strength
 - Abdominal sit up 45° hip flexion no pain, good strength
 - Oblique sit ups 45° hip flexion no pain, good strength
- Stretch tests: symmetrical length of adductors with mild pain on stretching of left adductors felt in proximal adductors. Symmetrical length on testing hip flexors and no pain on stretching

Imaging

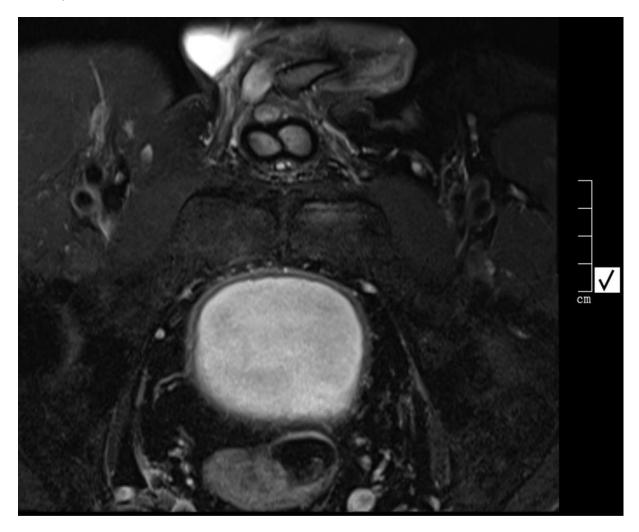
X-rays of pelvis (AP and Dunn view)





Report of the musculoskeletal radiologist: There is a moderate reduction of the articular surface of the lateral articular surface of the right hip. There is a reduced head –neck offset junction on the Dunn view.

MRI of pelvis (Axial view)



Report of the musculoskeletal radiologist: There is bone marrow oedema of the left pubic ramus. There is no visible cleft or tear of the left adductor tendon but there is adductor longus enthesiopathy. Cystioc changes at right adductor tendon origin due to previous injury. No rectus femoris abnormality. No signs of advanced pubic symphysis osteoarthritis. Normal fascia transversalis. Conclusion: left adductor longus tendinopathy without associated cleft or tear.

Case 2

History

- 31 year old male professional soccer player
- Normally trains on a daily basis
- Several episodes of pain in both adductors and in inguinal region over the years
- Normally treated with short duration of rest, modified training and some oral antiinflammatories
- In the past the pain settled with 2-3 weeks
- Now: Gradual onset left sided groin pain over the past 6 weeks
- Pain located around inguinal region on the left side
- The pain is worse on sprinting and changing directions
- Initially able to train and play without performance being affected
- Since 4 weeks pain after warming-up
- Now unable to sprint fully or change direction at speed
- Past medical history: right-sided partial medial meniscectomy
- Previous injury: 5 years ago right-sided partial medial meniscectomy, good recovery. Several
 contusions that did not need medical attention. Previous hamstrings strain left side 3 years ago
 with good recovery
- Medically fit, no health issues
- Medication: none. No allergies

Physical examination

- General healthy athletic male. Mild varus alignment both legs
- Lumbar spine normal pain free range of motion
- Horizontal pelvis
- Hip: Normal pain free flexion. 10° internal and 40° external rotation bilaterally. No pain on FABER or FADIR test
- Inspection groin region: no swelling, bruising or scars
- Palpation: Pain on palpation of the left external inguinal ring, conjoined tendon and inguinal ligament. There is no palpable inguinal hernia. No pain on palpation of proximal adductor tendon or attachment at the pubic bone. No pain on palpation of iliopsoas, rectus abdominus or other structures in the groin region
- Resistance testing:
 - Hip adduction 0°, 45°, 90° no pain, good strength
 - Hip flexion 0° and 90° no pain, good strength
 - Hip abduction 0° and 45° no pain, good strength
 - Abdominal sit up in 45° hip flexion pain in left inguinal region, good strength
 - Oblique sit ups 45° hip flexion pain in left inguinal region, good strength

• Stretch tests: symmetrical length of adductors with no pain on stretching. Symmetrical length on testing hip flexors and no pain on stretching

Imaging

X-rays of pelvis (AP view)



Report of the musculoskeletal radiologist: Hip and sacroiliac joints normal. No soft tissue abnormality. Moderate sclerosis of pubic symphysis.

Ultrasonography

Report of the musculoskeletal radiologist: There is no musculotendinous strain. No avulsion of the adductor longus tendon. Rectus abdominus muscles normal. The psoas muscles are normal. There is moderate bilateral bulging of the posterior wall of the inguinal canal, more on the left. No inguinal hernia.