

Athletic Pubalgia

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PRESENTATION

A 32-year-old man presented to the emergency department with complaint of pain in his hips and his pelvis. The patient stated he normally plays soccer, but can no longer play due to the pain. He reported that he had this pain previously, and rested for about 6 months, but he returned to play as a goalie the day prior to presentation. He said that his pain was so severe in the suprapubic area that he could not play his position.

The patient was originally from Brazil, and had been in the United States since age 14. He had no recent travel. He denied shortness of breath, chest pain, fever, or any constitutional symptoms. He was able to ambulate with minimal discomfort, but could not jog, pivot, or sprint without significant pain.

On exam, the patient's vital signs were normal: BP 122/64 mm Hg, pulse 64, RR 14, T 98.2, and pulse oximetry 98% on room air oxygen. The patient had a soft abdomen but was tender over the pubic symphysis. He was non-tender in all quadrants, and there were no masses, guarding, or rebound. On musculoskeletal exam, there were no deformities. The patient was able to fully range his hips bilaterally with external and internal rotation. He had pain with resisted leg adduction, and he was tender with sitting up.

A plain film of the pelvis was obtained (Figure 1).

DISCUSSION

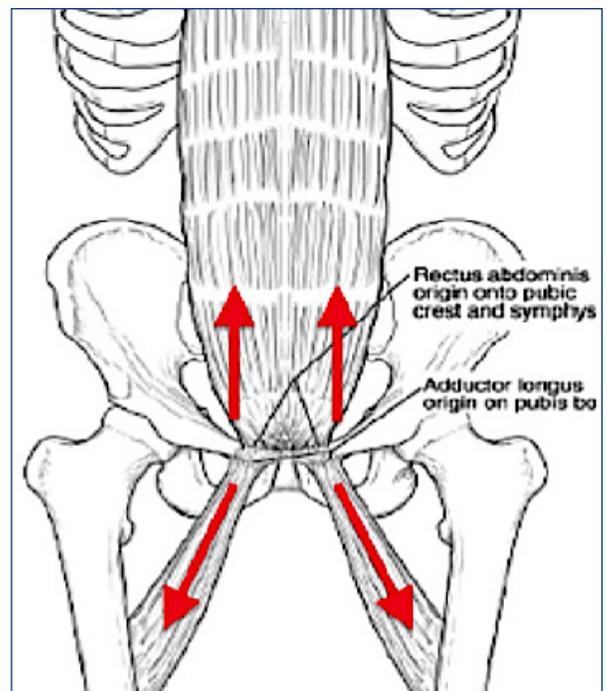
Athletic Pubalgia, originally referred to as Gilmore's groin, and commonly called Sports hernia or core muscle injury, is an injury to the structures comprising the pubic aponeurosis. (Figure 2)¹ During athletic movements (pivoting, cutting, kicking and twisting, explosive turning), significant but unequal forces by the rectus abdominus and adductor longus muscles are exerted on the pubic aponeurosis which overlies the pubic symphysis.¹ The rectus can be weakened by athletic movement, leading eventually to tearing in the rectus

Figure 1. (blue arrow) Large bony excrescence arising from the superior aspect of the right pubic symphysis extending to the left, consistent with chronic rectus abdominis insertional tendonopathy/tear (athletic pubalgia).



Figure 2. Pathoanatomy of Athletic Pubalgia

The rectus abdominus and adductor longus muscles pull in the opposite direction. With injury to the rectus an imbalance in muscle forces occurs causing groin pain.



and unopposed adductor forces, which may cause groin pain and the bony excrescence seen in our patient.

The diagnosis of athletic pubalgia is challenging. It is often misdiagnosed, and is often associated with femoral acetabular impingement.^{1,2,3} Plain films can be revealing but an MRI should be performed when athletic pubalgia is considered. MR arthrogram of the hip should be obtained if intraarticular hip pathology is suspected.⁴ Management of athletic pubalgia depends on pain and severity. Mild symptoms can be treated with rest, NSAIDs, and physical therapy. In moderate to severe injury, steroid injections can help alleviate pain, but surgical repair is eventually required.⁵

Our patient was referred to orthopedics for further outpatient diagnostic evaluation and management. Unfortunately, he did not follow up and repeated attempts to contact him were unsuccessful.

References

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