

## Groin Pain - Collegiate Soccer Player

Ariel Nassim MD Drexel University Sports Medicine

Sponsor: Thomas Trojan MD

**HISTORY:** Patient is a 21 year old men's collegiate soccer player presenting with complaints of left groin pain. He states the pain began 4 months prior to presentation. He was kneed in the left thigh at that time, and he subsequently sat out of a few games until the thigh pain improved. Upon improvement of his thigh pain, he began noticing increasing groin pain. Pain was sharp, constant, 1/10 when not active, however pain worsened with running (9/10). The pain was at times debilitating, causing him to have to lay still without moving. After about 2 hours of rest and immobility, the pain would improve. He was doing strengthening exercises with his certified athletic trainer, but were not helping. He had not taken pain medication, and the pain was not alleviated by any positions. At the time of evaluation he was not participating in practices, only participating in drills, and noted exacerbation of symptoms with any cutting movements. He denied any numbness or tingling in the legs. He also denied any weakness, pain with coughing, sneezing, or sex. Additionally, he denied any history of groin surgery or recent infections.

**PHYSICAL EXAMINATION:** Left hip appearance was normal. There was tenderness along the pubic symphysis as well as the proximal adductors, but not the ASIS, not the gluteus maximus, not the gluteus medius, not the greater trochanter and bursa, not the proximal hamstring and not the proximal quadriceps. Reproducible point tenderness in the left pubic symphysis. There was a relative decrease in range of motion of the left hip in all planes compared to right side with a component of pain limiting ROM testing, however overall within normal range. Motor strength of the left hip was normal. There was a positive impingement test in FADIR and there was reproducible pain with left leg adductor testing producing pain in the left groin. There was a negative FABER. The right hip had a normal appearance. There was no tenderness of the right hip. There was a full range of motion of the right hip. Motor strength was normal. Ely test was negative, as well as negative FABER test and negative impingement test. Negative for reproducible pain with right sided adductor testing, as well as bilateral rectus abdominus testing with resisted crutch.

### DIFFERENTIAL DIAGNOSIS:

Core muscle injury  
Adductor strain  
Stress fracture of pubic ramus  
Osteitis Pubis

### TESTS AND RESULTS:

MRI Pelvis and Left Hip Without Contrast (sports hernia protocol):

Normal appearance of the tendinous junctions of the rectus muscles and adductor muscles. There is increased T2 signal in both superior pubic rami adjacent to the symphysis pubis. There is prominent degenerative changes seen at the pubic symphysis, most consistent with osteitis pubis and/or pelvic instability.

Evaluation of the left hip demonstrates normal signal intensity from bone marrow. The joint space is preserved. There is no suggestion of labral tear.

**FINAL/WORKING DIAGNOSIS:**

Osteitis Pubis

**TREATMENT AND OUTCOMES:**

1. Ibuprofen 800mg before games and/or practices.
2. Icing of the left groin after games and practices.
3. He was advised to initiate a core strengthening program under the direction of his certified athletic trainer.

After 3 weeks, he states his pain is much improved, he is now participating in full practices and games, and has no limitations from his pain. He states he is doing core strengthening at home on a daily basis. He takes ibuprofen 800mg prior to playing, which he states helps prevent the pain from coming on, along with icing after games and practices, for which he states helps tremendously with pain and discomfort. He has 0/10 pain at rest, and states the worse pain he will have after prolonged intense activity is 5/10.