

Hip Pain in a Male High School Runner

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HISTORY: This is a case of a 16yo male cross country runner who presented to the sports medicine clinic with a chief complaint of right hip and thigh pain. The pain had been present for about 2 weeks, interfered with his running, and progressed to the point where it was painful to walk. He has no significant past medical history. He is a non-smoker, non-drinking, and non-drug user. Family hx is only significant for breast cancer in his grandmother.

PHYSICAL EXAMINATION: Normal gait, no pain to palpation, no erythema, no swelling. He experienced pain with hip flexion, that was located in the anterior groin and radiated to the thigh. Full ROM, full strength. FABER and FADIR reproduced the thigh pain. He refused to jump on the right leg, stating it would hurt.

DIFFERENTIAL DIAGNOSIS: Prior to MRI: stress fracture, labral tear, FAI, tumor. Following MRI: eosinophilic granuloma, osteoid osteoma, osteomyelitis (bacterial, fungal, tubercular), Ewing sarcoma, osteosarcoma, lymphoma, multiple myeloma, metastasis, skeletal syphilis, Brodie abscess, chondroblastoma, giant cell tumor.

TESTS AND RESULTS: CBC, CMP, CRP, were normal. Xray at the initial visit was negative. There was concern for a stress fracture, so he was sent for an MRI. The MRI showed a well circumscribed 1cmx2cm T2 enhancing lesion in the proximal femur. He was sent to pediatric orthopedic surgery for bone biopsy. Frozen section at biopsy was negative for malignancy, and was read as "myxoid lesion." The remainder of the lesion was curretted, and a bone graft was placed. The tissue was sent for pathology and cultures. Pathology reported as acute on chronic inflammation consistent with osteomyelitis, but cultures and stains were negative.

FINAL/WORKING DIAGNOSIS: Aseptic Osteomyelitis.

TREATMENT AND OUTCOMES: The definitive treatment was surgery. The patient recovered well after surgery. No antibiotics were given due to negative culture data. He began a graduated running program at 6 weeks, and was running pain free at 12 weeks.