Interesting Case of Abdominal Pain and Knee Pain in a Soccer Player
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HISTORY:
A 6yoM presented to the emergency department for one day of abdominal pain and fevers up to 104.2 at home. The patient was admitted to pediatric surgery service for a rule out appendicitis. CT abdomen/pelvis was negative and he was discharged. He presented back to the ED the following night after discharge for right knee pain. His pain began that evening while playing in the McDonald’s playplace. His pain was noted in the posterior right knee, was worse with weight bearing activities, with swelling and mild warmth, no falls or injuries. His mother also noted that he had fever 103.7F while at home.

PHYSICAL EXAMINATION:
Abdominal exam benign.
R knee with decreased range of motion in flexion secondary to pain, can bring R hip to the chest. Swelling and warmth over the right knee without erythema, however moderate joint effusion present.

DIFFERENTIAL DIAGNOSIS:
Septic arthritis, Bacteremia, Subperiosteal abscess

TESTS AND RESULTS:
Knee arthrocentesis done under MSUS guidance for 20cc of cloudy fluid cell count noting 71600 wbc and gram stain noting many PMNs but no organisms. WBC 9.64K/uL, ESR 25mm/hr, Low sensitivity CRP 129mg/L, lactic acid 1.5mmol/L. Blood cultures positive for group a beta hemolytic streptococcus. Synovial fluid culture grows group a beta hemolytic streptococcus. Right knee xrays had no evidence of bony abnormalities and no noted joint effusions. Right knee and hip MRI: Moderate knee joint effusion, evidence of synovitis, concerning for septic arthritis. Signal abnormality in right distal femoral metaphysis, concerning for early osteomyelitis. Subperiosteal abscess along right posteromedial distal femoral metaphysis. Right hip without evidence of abscess or osteomyelitis.

FINAL/WORKING DIAGNOSIS:
Group a beta hemolytic streptococcus septic arthritis with osteomyelitis and subperiosteal abscess perhaps presenting with abdominal pain

TREATMENT AND OUTCOMES:
1. Started empirically on vancomycin/ceftriaxone switched to clindamycin after blood/synovial fluid cultures came back sensitive
2. OR with orthopedics for debridement and irrigation of the knee with bone biopsy.
3. Back to normal activities