

Acute Patella Subluxation in Crossfit Athlete, Not So Fast

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HISTORY: A 30 CRNA active crossfit athlete sustained a right knee twisting/patella subluxation when she was doing a clean and jerk at a crossfit gym. She felt as though her patella displaced laterally and then her knee gave out. Her patella spontaneously reduced after she extended her knee. She went to the community ED later that day where her x-rays were negative; she was placed in a knee immobilizer and followed up with the sports medicine clinic 2 days later for follow-up.

PHYSICAL EXAMINATION: Right knee: TTP over suprapatellar region, 2+effusion, 3/5 extension of right knee, ligamentous structures difficult to evaluate due to guarding. Pain with forced flexion, otherwise NVI distally, compartments soft.

DIFFERENTIAL DIAGNOSIS: Patella instability, ACL tear, PCL tear, osteochondral defect, meniscal injury, quad tendon rupture, patella tendon rupture.

TESTS AND RESULTS: X-ray shows good maintenance of patellofemoral and tibiofemoral joint spaces. Decision to get MRI was made considering she had tense effusion and was a female of child bearing age. MRI shows torn ACL, tear of posterior horn of medial meniscus extending to superior articular surface, vertical tear of lateral meniscus extending to superior articular surface, 13mm full-thickness cartilage loss overlying medial femoral condyle, 5mm region of full thickness cartilage loss overlying lateral femoral condyle.

FINAL/WORKING DIAGNOSIS: ACL tear, medial and lateral meniscal tears with articular cartilage injury.

TREATMENTS AND OUTCOMES: Evaluated by Orthopedic Sports Surgeon who decided on 2 weeks of rehab and she worked on maintaining range of motion and quadriceps strengthening. She then underwent successful surgery with ACL reconstruction, medial/posteromedial reconstruction, allograft for ACL reconstruction and microfracture of medial femoral condyle.