Patella Ossification Avulsion Fracture in a Division I Women’s Basketball Athlete  
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**Background:** Twenty-one year old women’s basketball athlete attempted a layup on the baseline during the second half of the conference semifinal. She landed on a flexed right knee, with weight distributed posteriorly to her foot, causing her knee to buckle. Initial evaluation revealed that her patella was shifted superiorly, with significant swelling medial, lateral and distal to the patella. The athlete was point tender along the inferior angle of the patella and the patellar tendon. Range of motion testing yielded limited knee flexion due to extreme pain. Special Tests performed revealed (-) Lachman’s, (-) Valgus/Varus, (-) McMurray’s, (+) Patellar Glide for pain and hypermobility, (+) Patellar Tilt for pain and hypermobility. The patient has a history of a left ACL reconstruction approximately one year prior. **Differential Diagnosis:** Patellar tendon rupture, patella dislocation.  
**Treatment:** Radiograph and MRI revealed an avulsion fracture of an unknown preexisting ossification on the inferior angle of the right patella. Surgical repair was performed to approximate the patellar tendon to the patella. The athlete was non weight bearing with crutches and a knee immobilizer in extension. The first 4 weeks of rehabilitation focused on regaining range of motion with heel slides and wall slides. Strengthening exercises were initiated to minimize atrophy with quad sets, heel digs, and with Russian electrical stimulation. Patient was progressed to AROM and 4-way straight leg raises by week 4. Passive knee flexion exercises, in a brace, and minimal resistance bike began week 6. By week 12, the patient was at full ROM and had restored gait mechanics; patient was also progressed to jogging. Cardio conditioning and strength and agility programs were also implemented at this time. Quadriceps strengthening and closed-kinetic chain exercises were begun at week 12 onwards until the patient was cleared to participate in team offseason activities after week 20. **Uniqueness:** The combination of two separate injuries/conditions in a 21 year old athlete is unique as patella tendon ruptures are common in people over the age of 50. What compounds the uniqueness is the etiology of the patella tendon rupture. The athletes’ aggressive rehabilitation of her left ACL reconstruction a year prior may have caused her to compensate with her right leg. This could have stimulated the growth of an ossification, due to Wolff’s law, where the tendon attaches at the inferior angle of the right patella. When she landed on her right leg after her layup, landing with a flexed knee and her weight shifted posteriorly a strong eccentric contraction of the quadriceps was induced. This contraction produced enough force to cause an avulsion fracture of the ossification off of the patella’s inferior pole. **Conclusion:** Athletic trainers should be aware of compensatory motions associated with injuries resulting in altered weight bearing and subsequently gait. These compensations may lead to structural deformations putting the athlete at risk for other injuries. Despite the severity of the injury, the athlete was able to return to participation within 7 months of the initial injury. **Relevant Evidence:** No relevant evidence. **Word Count:** 491.