Background: During a basketball game in February of 2004 an opponent backed into a 19-year-old healthy female basketball player striking her in the left thigh and knee region while her femur was extended and internally rotated. She felt a pop and pain in her groin and pain in her knee. As the athlete ran back on defense, she heard a clunk in her left hip, her knee locked and she fell to the ground. Upon examination she was point tender along the medial aspect of the left patella and over the left greater trochanter. She complained of deep pain in her hip region which limited her motion and shooting pain that radiated into her left knee; pain increased with hip movement. Myotomes and dermatomes were assessed to be within normal limits. Positive tests included patella apprehension, hip distraction, and hip compression. Negative tests were McMurrays, Lachmans and valgus stress test. Differential Diagnosis: Patella subluxation, lateral meniscus tear, torn lateral retinaculum, hip subluxation, osteochondral disruption, femoral head or neck fracture, femoral head contusion and acetabular labral tear. Treatment: Manual testing and MRI of the left knee revealed no injury. Lateral x-ray of the pelvis and left hip were negative. MRI of the hip revealed a tear in the superior posterior labrum as well as articular damage to the medial superior head of the femur. A loose body was located anteriorly to the femoral neck. Athlete began physical therapy for two and a half months which included range of motion exercises, core and lower extremity strengthening, proprioception, and cardiovascular training. Significant improvement was not achieved. In May of 2004, the athlete underwent a diagnostic hip arthroscopy and debridement surgery which revealed a chondral flap consistent with a posterior subluxation episode; an acetabular tear on the posterior portion of the superior labrum was debrided back to a stable rim and loose bodies were removed. An osteochondral fracture (1.2 x 2cm) was discovered along the anterior margin of the femoral head with no signs of healing. A second bi-lobed lesion (1.5cm) was identified just anterior to the first lesion, both lesions were along the anterior margin of the femoral head and were consistent with posterior subluxation trauma. Repair to these lesions were not performed because it was not possible to gain access to this zone. Five months post surgery the athlete continued to experience pain which limited the athlete’s range of motion and activities. In March of 2005, the athlete underwent arthroscopy with chondroplasty, surgical microfracture of the femoral head to induce healing and removal of loose bodies. Following surgery, the athlete began rehabilitation which included range of motion exercises, core and lower extremity strengthening, and cardiovascular training. In May of 2005, the athlete was still experiencing significant pain. A third MRI revealed that there was only marginal healing of the osteochondral fracture. A third surgery was performed via hip dislocation revealing a significant cartilage fragment in the posterior region of the femoral head (1x3cm) which was debrided. Following surgery the athlete reported a significant decrease in pain. Uniqueness: Dislocations and subluxations of the hip are rare in athletes. When posterior hip subluxations occur the common mechanism is internal rotation and flexion at the hip with a violent force along the femoral shaft. In this case the athlete’s hip was internally rotated and extended and the athlete appeared to experience a low energy force perpendicular to the femoral shaft. Conclusion: Despite low impact injuries to the hip region, clinicians should consider hip injuries as traumatic and be cautious in return to play progression, as they may have life long consequences. Key Words: hip subluxation