Deep Vein Thrombosis in a Collegiate Football Player, Post-Posterior Cruciate Ligament Tear with Non-Surgical Intervention

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**Background:** 19 year-old, male football offensive lineman. Sustained a blow to his left lower leg during practice when a defenseman collided into his tibia and his knee was forced into hyperextension. He was wearing a generic, ACL knee brace at the time of the incident. The athlete reported feeling a “pop” and could feel his knee brace “catch” his knee when it was forced into hyperextension. Upon initial on-field evaluation, there was tenderness on palpation of the left lateral joint line. It also included a negative Lachman’s, negative valgus/varus stress, negative anterior drawer, negative pivot-shift, and positive posterior drawer. He was placed in a straight-leg immobilizer and given crutches with non-weight bearing status. An MRI the next day revealed a posterior cruciate ligament tear with a microfracture of his lateral tibial plateau. Patient started a posterior cruciate ligament tear rehabilitation program. Two weeks later, he was put into a sports brace that was locked in full extension, but he was able to unlock it when seated. He was also upgraded to partial weight-bearing status on his crutches. Three days after he was upgraded he noted a throbbing, point tender pain near the musculotendinous junction of his left medial gastrocnemius. The pain was most noticeable when seated in class for long periods and the pain disrupted his sleep. Active dorsiflexion and plantar flexion and passive dorsiflexion exacerbated symptoms. MMTs for dorsiflexion/plantar flexion were 5/5. He also had a positive Homan’s sign. Referred to Sports Medicine to rule out a deep vein thrombosis (DVT). **Differential Diagnosis:** Knee brace strap irritation, gastrocnemius pain secondary to immobilization and improper gait mechanics, gastrocnemius strain. **Treatment:** The ultrasound indicated that there was a small clot in his posterior tibial vein, and confirmed the DVT diagnosis. The athlete started taking 162 mg (two 81 mg tablets) of generic aspirin once a day and was instructed to discontinue his rehabilitation program until symptoms subsided. He continued to ice and elevate his knee without compression due to its contraindications with the condition. 72 hours after he started taking the aspirin, he was allowed to use a moist heat pack to alleviate his calf pain. Active, pain-free knee/ankle motion was introduced when symptoms improved. One week later, symptoms ceased and he resumed his rehabilitation program for his PCL tear. **Uniqueness:** Deep vein thrombosis usually occurs in post surgical patients due to stagnant blood flow, blood coagulation, or damaged vein walls from surgery. It is rare to have a DVT secondary to injury and not surgical intervention. **Conclusions:** DVT is a vascular complication that can lead to other serious conditions if it is not recognized and referred right away. The muscular deficiency associated with prolonged immobilization is a main concern for a rehabilitation program. However, immediate attention and proper care must be used when problems of the circulatory or nervous system arise. It is the clinician’s responsibility to be aware of new symptoms that arise and be able to address them appropriately to rule out the possibility of a more serious condition. **Word Count:** 501