A High School Football Player with a Morel-Lavallee Lesion
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**Background:** A 16-year-old male football player suffered a unique injury called a Morel-Lavallee lesion. A Morel-Lavallee lesion is caused by forces of pressure and sheer stress at the border of subcutaneous tissue and the muscle fascia or bone. Due to the sheer force this results in the separation of the tissue. Mechanism of Injury: Direct blow to the medial aspect of the lower leg. Initial examination revealed excessive edema and ecchymosis along the medial joint line to the proximal third of the tibia. There was an egg shaped contusion distal to the tibial plateau. No point tenderness or palpable pain was found. Neurological assessment was normal. Active ROM was normal except for missing last 10 degrees of knee flexion. Valgus, Varus, Anterior Drawer, Lachman’s, Pivot-Shift, Bouce-Home Test, Godfrey 90-90 were negative. Athlete’s most common complaint was leg felt tight. **Differential Diagnosis:** Prepatellar bursitis, Subpatellar bursitis, Tibial Plateau contusion, tibia fracture, Morel-Lavallee lesion, and MCL sprain. X-rays ruled out any fractures. Athlete was diagnosed with a Morel-Lavallee Lesion of the knee and lower leg. **Treatment:** On the first day post injury the goal of the treatment was to decrease excessive edema and ecchymosis. Biocompression was administered for 30 minutes; electrical stimulation pulsed over the bursitis-like contusion for 20 minutes. This treatment was done twice that day. The afternoon treatment consisted of Game Ready® for 30 minutes. The athlete was given a compression sleeve to wear. Two days post injury the athlete report to the orthopedic physician. Physician’s first impression was subpatellar bursitis. Orthopedic physician ordered aspiration of swollen area. The edema was not reduced by aspiration. Physician instructed to use heat as a main modality due to the diagnosis of a Morel-Lavallee Lesion. Athlete returned to orthopedic physician on Friday 10/7 for second aspiration attempt, with little success; Recommended to continue with treatment. Three weeks post injury, the athlete continues treatment of heat pack for 20 minutes, then a warm up before practice on the stationary bike on level 5 for 20 minutes keeping the RPM between 70 and 80 RPM. Ice administered post practice. Athlete states he has no pain or trouble playing football. Athlete no longer feels tightness. Edema has not reduced in size and now resembles pitting edema. Goals are to decrease the edema, ecchymosis, and to relieve the soft tissue hematoma. **Uniqueness:** Morel-Lavallee Lesion is a rare condition that is a closed degloving injury, resulting in a cavity filled with hematoma and liquefied fat. Skin tears away from fascia or subcutaneous tissue. According to the few documented diagnosis of this condition, it is has occurred to athletes involved in football, cycling, and climbers. Pain is usually found in this type of injury. The athlete in this case never reported any pain. His most severe symptom was lack of ROM and a feeling of tightness. **Conclusion:** Morel-Lavallee lesion is a rare injury that has both history and clinical symptoms of a quadriceps contusion and a subpatellar or prepatellar bursitis. This injury can also be found in the hip and the knee. A French physician first described this injury by the name of Maurice Morel-Lavallee in 1853. If therapy is insufficient, necrosis can form in large areas of the body. If this injury is not taken care of properly it can lead to necrosis and edema will remain in that capsule. **Word Count:** 590