Background: This case report describes the treatment of a twenty-one year old volleyball player (75 kg/74 cm) who had surgery to repair a supraspinatus tear. As a freshman, she suffered from multidirectional instability. The focus of treatment was on increasing dynamic shoulder strength. She successfully managed her pain until junior year at that time the symptoms became overwhelming; she felt popping and clicking during warm up and practice. Upon examination, there was no edema, ecchymosis, or deficiency. Upon palpation, crepitus was felt and the athlete was point tender over the coracoid process. The pain level was a 7/10. AROM produced pain at all end ranges. PROM revealed abnormal end feels in flexion and internal rotation. RROM: was decreased in the subscapularis (3/5) and supraspinatus (4/5). Differential Diagnosis: Rotator Cuff pathology with impingement; labral tear. Treatment: An MRI revealed a partial supraspinatus tear. Surgery was performed to repair the supraspinatus tear with a capsular plication. Following surgery, she was placed in a pillow sling at 90°/90°. Two days after surgery, rehabilitation started. Goals of rehabilitation included: decreasing pain and inflammation, and prevention of muscle atrophy. Exercises included: pendulums, finger webbing, wrist and elbow AROM. Isometrics were added four days following surgery, which included: flexion, extension, abduction, adduction, internal rotation and external rotation. Theraband AAROM was also included. Three weeks after surgery, scapular squeezes and ER/IR with tubing at 0° were introduced into the treatment. A week later, wall walks, scapular rows and stretch IR/ER at 90° were included. Three weeks after surgery, range of motion was improving. She had 115° of flexion, 75° of abduction, and full internal rotation. One month after surgery, the athlete came in complaining of more pain and discomfort than usual. She had slept without the sling on the night before and had fallen asleep on the surgically repaired shoulder. Her PROM for flexion decreased significantly to 35°. Her RROM for flexion went from a 5/5 to a 1+/5. She was diagnosed with a brachial plexus palsy. Following the palsy, the treatment slowed down significantly because she could no longer raise her arm actively. Her motor strength decreased to 2/5. The rehabilitation following the palsy included heat and electrical stimulation, stretching ROM, bicep curls, tricep curls, wall walks, scapular clocks, rhythmic stabilizations and shrugs, and treatment concluding with ice and electrical stimulation. She continued to progress slowly and gain range of motion and finally strength in her shoulder. Eight months after surgery, she had no pain with palpation of her shoulder. Her AROM was still asymmetric. Uniqueness: This case is unique because the athlete suffered from a brachial plexus palsy unrelated to surgery. After sleeping on her injured shoulder, she had significant decrease in the strength of her shoulder muscles. Her strength and range of motion decreased to thepoint where she could not lift her arm against gravity. She had a significant amount of pain. Rehabilitation had to incorporate exercises and modalities to retrain her muscles to fire again. Conclusion: This case shows the importance of changing a rehabilitation plan according to the progression of the athlete. After the brachial plexus palsy, the athlete had a difficult time gaining full range of motion and strength because she felt that recovering was too hard. It is important to know how the athlete is dealing with the surgery and treatment because that tends to play a large factor in their ability to progress. Word Count: 565.