Shoulder Injury – Recreational Bowler

James F. Kelley MD and Adae Amoako MD, Penn State Hershey Family Medicine Residency
Sponsor: Jessica Butts MD

**HISTORY:** 59-year-old gentleman presented to his primary care office with a complaint of left shoulder pain. He reported that he had thrown a snowball at a family member, when he felt a “pop” in his shoulder, followed by pain. The pain was an aching quality and intermittent, located on the lateral aspect of his shoulder. There was no impact on his arm’s range of motion. It initially responded to warm and cold compresses, but the pain worsened and he soon had difficulty putting his coat on. He used non-steroidal anti-inflammatories with moderate reduction of pain. While he had no history of acute shoulder injury or surgery in the past, the patient has been a recreational bowler for thirty years, and reported long standing discomfort with range of motion in his left shoulder for years. The patient was diagnosed with a rotator cuff injury, prescribed a prescription strength dose non-steroidal anti-inflammatory, and referred to physical therapy. Patient returned to clinic after four days of treatment due to developing ecchymosis over his anterior arm. Patient had allergies to antibiotics, but no known NSAID allergies.

**PHYSICAL EXAMINATION:** On initial exam: He had tenderness on palpation of his lateral left shoulder. He was documented as having 5/5 strength. Empty Can and Lift-Off Test were positive. On subsequent exam tenderness was localized in the bicipital groove and nonblanching ecchymosis was noted on the distal half of his left bicep. The gross appearance of his biceps was asymmetric, with left bicep larger than the right. He had 5/5 upper extremity testing, except for 4/5 strength on left arm flexion, abduction, internal and external rotation, left elbow flexion and left wrist supination. He had a positive Yergason’s and Speed’s test on left side.


**TESTS AND RESULTS:** D-dimer to screen for DVT was negative.

**FINAL/WORKING DIAGNOSIS:** Proximal rupture of Biceps Long Head tendon, likely secondary to tendon remodeling caused by long standing supraspinatus inflammation from bowling.

**TREATMENT AND OUTCOMES:** 1. Initiated physical therapy 2. NSAIDs as needed for pain. 3. Began with external rotation resistance exercises and shoulder flexion. 4. Advanced to bicep curls, brachioradialis curls, and triceps extensions with light weights. 5. Progressed to shoulder rows and lateral pull downs. 6. After two months of physical therapy, patient reported 0/10 pain with passive range of shoulder motion. 7. After six physical therapy visits he was discharged with a home exercise routine, and has not complained of shoulder pain to his primary care physician in follow up visits.