TACSM Abstract - Case Study

Partial Rupture of the Distal Biceps Tendon in a Collegiate Football Player

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ABSTRACT

CASE HISTORY: The patient is a 20-year-old collegiate football player who presented to the athletic training staff with pain in his left arm near his elbow. He states that he was attempting to make a tackle and that his arm was pushed into hyperextension by another player. He reported discomfort, pain, and numbness in his arm. He attempted to continue to play after completing arm flexion and extension in between plays. His pain levels increased as his range of motion activity continued. The patient could no longer continue during practice and was taken to the medical tent for further evaluation PHYSICAL EXAM: He had point tenderness around the distal end of his biceps brachii muscle and had limited range of motion. The patient presented with a deformity the cubital region of his left arm when compared bilaterally. The patient was referred to the team physician for further evaluation and diagnostic imaging.

DIFFERENTIAL DIAGNOSES: Strained biceps muscle, strained brachioradialis muscle, strained triceps muscle, ruptured biceps tendon.

TESTS & RESULTS: The patient underwent magnetic resonance imaging (MRI) which revealed a partial rupture of the biceps tendon.

FINAL DIAGNOSIS: Partial rupture of the distal biceps tendon.

DISCUSSION: Ruptures of the distal biceps tendon are commonly seen in men over the age of 40, usually the result of overuse. The mechanism of injury in this case was an eccentric load placed on the arm as the arm moved from flexion into extension. The patient is young, collegiate football player, and the injury is not commonly seen in collegiate level athletes.

OUTCOME OF THE CASE: After consulting with the patient’s family and the sports medicine staff, it was decided that surgery was the best option for the patient. He underwent a successful surgery to repair his partially ruptured tendon. The operating physician utilized a dual incision technique to reattach the ruptured tendon. The patient was placed in an immobilizing brace for two weeks, and then began his rehabilitation.

RETURN TO ACTIVITY AND FURTHER FOLLOW-UP: The rehabilitation plan currently consists of active, passive, and resisted range of motion. He is able to lift a dumbbell for arm flexion and extension, and he is working on grip strength and forearm supination as well. He continues to work with the athletic training staff, and will follow up with the team physician if necessary.