**ABSTRACT**

**Background:** Complete rupture of the distal tendon of the biceps brachii is relatively rare and there is little information to guide therapists in rehabilitation after this injury. The purposes of this case report are to review the rehabilitation concepts used for treating such an injury, and discuss how to modify exercises during rehabilitation based on patient progression while adhering to physician recommended guidelines and standard treatment protocols.

**Case Presentation:** The patient was an active 38-year old male experienced in weight-training. He presented with a surgically repaired right distal biceps tendon following an accident on a trampoline adapted with a bungee suspension harness. The intervention focused on restoring range of motion and strengthening of the supporting muscles of the upper extremity without placing undue stress on the biceps brachii.

**Outcomes:** The patient was able to progress from a moderate restriction in ROM to full AROM two weeks ahead of the physician's post-operative orders and initiate a re-strengthening protocol by the eighth week of rehabilitation. At the eighth post-operative week the patient reported no deficits in functional abilities throughout his normal daily activities with his affected upper extremity.

**Discussion:** The results of this case report strengthen current knowledge regarding physical therapy treatment for a distal biceps tendon repair while at the same time providing new insights for future protocol considerations in active individuals. Most current protocols do not advocate aggressive stretching, AROM, or strengthening of a surgically repaired biceps tendon early in the rehabilitation process due to the fear of a re-rupture. In the opinion of the authors, if full AROM can be achieved before the 6th week of rehabilitation, initiating a slow transition into light strengthening of the biceps brachii may be possible.

**Keywords:** Distal biceps tendon surgical repair, rehabilitation guidelines

**Level of evidence:** 4-Single Case report