Return to Play Following Arthroscopic Repair of Triangular Fibrocartilage Complex (TFCC) Peripheral Tears in Collegiate Athletes

Abstract:

Introduction: Injury to the triangular fibrocartilage complex (TFCC) is a frequent cause of pain and disability in the collegiate athlete. There is a scarcity of data regarding ability to return to preinjury levels of athletic participation. The purpose of this study was to review the outcomes of collegiate athletes with arthroscopically repaired peripheral TFCC tears and determine their ability to return to their preoperative level of activity.

Methods: Using corresponding procedural terminology code 25107, a retrospective chart review was performed for all patients who underwent arthroscopic treatment of peripheral TFCC tears from 2015 – 2019 at a single institution. Patients were included if they were collegiate level athletes with peripheral TFCC tears undergoing arthroscopic repair, unable to participate in their sport secondary to wrist pain, and had a desire to return to their sport. All operative patients had imaging studies and clinical findings consistent with TFCC injury as the primary source of their activity-limiting pain and had failed nonoperative management prior to surgery. Medical records were reviewed to ascertain the mechanism of injury, repair technique, time to return-to-play, and complications.

Results: In total, 7 collegiate athletes with peripheral TFCC arthroscopic repairs were identified. Five were female, and age range was 19-22 years. The most common sport was softball (3/7) and most injuries were to the non-dominant hand (5/7). Four (57%) were repaired with suture anchors, three (42%) were repaired with either 3-0 prolene or PDS suture. On average, athletes returned to some level of play at 7.8 weeks (range 6-10) after routine post-operative
immobilization and rehabilitation and to full participation by 3.3 months. One patient developed a dorsal wrist ganglion cyst requiring re-operation.

**Conclusion:** Arthroscopic repair of peripheral TFCC lesions in collegiate athletes after failure of conservative treatment allowed return to sport at previous level of participation.

Level of Evidence: I