Arthroscopic Fovea Repair with Suture Anchor for Traumatic tears of Triangular Fibrocartilage Complex

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Purpose: Fovea tears in the traumatic triangular fibrocartilage complex (TFCC) are generally caused by falling accidents with pronated, hyperextended wrists, or by distraction injuries that pull the ulnar side of the wrist out of place. The fovea tears in the triangular fibrocartilage complex often appear in association with ulnar wrist pain and limited wrist function in work or sport. This study addressed the arthroscopic repair of fovea tears in the TFCC with suture anchor, in a sample of 67 patients who were undergoing TFCC fovea repair by wrist arthroscopy.

Materials and Methods: From September 2014 to February 2016, 67 patients underwent TFCC fovea repair with suture anchor by wrist arthroscopy. The mean follow-up period was 25.6 months (range, 22–28 months), and the patients’ average age was 26.7 years. The study included 52 men and 15 women. All patients had early fovea TFCC tears and no wrist fractures. The 1.4mm suture anchor with outside-in method was used to repair the foveal tears and with splinting was applied for 6 weeks. After operation, patients were rehabilitated, reexamined, and followed up at the clinic. Complications were also recorded.

Results: The results were graded with a Mayo Modified Wrist Score and DASH scores. Twenty-eight of the 67 wrists were rated excellent, 34 were good, and 5 were fair. Overall, 62 of 67 patients (92.5%) rated satisfactorily and returned to sporting or work activities. Five (7.5%) patients experienced mild pain during work or exercise. Although motion remained normal for these patients, grip strength on the affected hand was at least 85% of that on the other hand.

Conclusion: Arthroscopic repair of early fovea tears of the triangular fibrocartilage complex is a satisfactory method of repair. The procedure can enhance patients’ wrist function by relieving pain and increasing tolerance for work or sport.