Double-loop locking cross-stitch suture and suspension fixation for medial collateral ligament origin reconstruction

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ABSTRACT. The purpose of this study was to summarize the clinical application and results of the double-loop locking cross-stitch suture and suspension fixation method for medial collateral ligament origin reconstruction. Thirty-six patients (21 males, 15 females) with an average age of 40 years (range = 17-58 years), who underwent treatment for acute fracture of the medial collateral ligament at our hospital from February 2008 to May 2009, were included in this study. All patients presented unilateral injuries (17 right-sided, 19 left-sided) and underwent repair with the double-loop locking cross-stitch suture and suspension fixation method. All incisions in this group of patients healed by first intention. Thirty-two patients were followed up for 6-20 months (average = 12 months). There were no reports of wound infection, ligament re-fracture or other complications in the follow-up period. Based on the Lysholm knee-scoring scale, the patients received a 100% excellent and good rating (20 patients - excellent score, 12 patients - good score) postoperatively. The advantages of the double-loop locking cross-stitch suture and suspension fixation method are a smaller incision, reliable fixation, and early restoration of knee joint...
stability. It is, therefore, an effective and low-risk method for the reconstruction of medial collateral ligament origin.

**Key words:** Medial collateral ligament; Ligament rupture; Loop locking; Knee joint