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### ***Surgical Procedures***

Each arthroscopic repair was performed by a senior author with the patient under general anesthesia in the beach chair position. The tear configuration was identified in the setting of the standard lateral viewing portal and the anterolateral working portal. The mobility of anterior and posterior leaves of the torn tendon was evaluated. To improve the mobility of the anterior leaf, an anterior interval slide was performed using an electrocautery device to release the coracohumeral ligament at the coracoid base in all patients.

In the complete repair group (Group C), the posterior interval slide was also performed to improve the mobility of the posterior leaf; the scapular spine was identified as a landmark to develop the interval between the supraspinatus and infraspinatus tendons. First, traction sutures were placed on both anterior and posterior leaves of the torn tendon. Then, to prevent suprascapular nerve injury during the interval slide procedure, the sutures were pulled and spread out to place the retracted tendon away from the scapular spine (Fig. 1). After releasing the interval very carefully using arthroscopic scissors and an electrocautery device, the improved mobility of both interval slide leaves was confirmed. Then, complete repair using suture anchors in the setting of side-to-side repair of both leaves was achieved.

In the partial repair group (Group P), an additional posterior interval slide was not performed and mobility of the posterior leaf of the torn tendon was not sufficient for complete repair. Therefore, partial repair using suture anchors and margin convergence by side-to-side repair was performed, leaving a residual defect.

### ***Postoperative Rehabilitation***

After surgery, the affected arm was kept in abduction for 6 weeks. During the first 6 weeks, pendulum and gentle self-assisted circumduction exercise were begun. Six weeks after surgery, self-assisted passive ROM exercises (e.g., the table sliding stretch and forward flexion of the shoulder in the supine position) were initiated. At 8 weeks after surgery, each patient was encouraged to perform active assisted ROM exercises during the subsequent period. Three months after surgery, isotonic strengthening exercises using an elastic band were begun. Six months after surgery, the patients were allowed to gradually return to their pre-morbid levels of sports activity.