

Traumatic Initial Versus Recurrent Anterior Dislocation in Shoulder

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Introduction

Although recent some studies proposed arthroscopic stabilization as the treatment for traumatic initial anterior dislocation of shoulder in active young adults or athletes, the method is still controversial. Thus, we examined arthroscopic findings and the outcomes of arthroscopic Bankart repair in traumatic initial anterior dislocation and recurrent anterior dislocation.

Material and Methods

The study was performed on 16 cases of traumatic initial anterior dislocation and 44 cases of recurrent anterior dislocation underwent Bankart repair using a suture anchor under arthroscopy. Patients without Bankart lesion or with greater tuberosity avulsion fracture at the initial dislocation were excluded from the study. The follow-up period was average 23 months (12~47 months) in the initial dislocation group and average 26 months (14~51 months) in the recurrent dislocation group. The mean age of the initial dislocation group was 22 years (15~27 years) and the recurrence group was 24 years (16~38 years). In the initial dislocation group, 11 cases were athletes, 1 case was soldier, and 4 cases were non-athletes. Arthroscopic Bankart lesion and the adjacent tissues were compared, and the function of the shoulder after surgery was evaluated by Rowe rating scale.

Result

The arthroscopic findings of the initial dislocation group were that Bankart lesions were robust, elastic, and unretracted, and the adjacent capsular ligament was hemorrhagic or hemosiderosis. In the recurrent dislocation, Bankart lesions were slightly pale due to the insufficient blood supply, inelastic, fibrillated, displaced in many cases, and the detached area was filled with the granulation tissue of synovium resulting in adhesion in many cases. In addition, capsular ligament was relaxed, and the fibrillation or erosion in the anterior glenoid rim was detected frequently. Hill-Sachs lesion was detected in 9 cases (56%) of the initial dislocation group and 43 cases (98%) of the recurrent group. The outcome of surgery according to Rowe scoring scale was average 95 points in the initial dislocation group: 15 cases (94%) were above good and 1 case (6%) was fair. In the recurrent group, the average was 91 points: 31 cases (70%) were excellent, 8 cases (18%) were good, 3 cases (7%) were fair, and 2 cases (5%) were poor. After surgery, in the initial dislocation group, recurrence was not detected and apprehension was detected in 1 case (6%). In the recurrent dislocation group, redislocation was detected in 1 case (2.3%), subluxation in 1 case (2.3%), and apprehension in 2 cases (4.5%). The instability was detected in total 4 cases (9%). The nearly full recovery of the athletic capacity or activity in comparison with prior to injury was 14 cases (88%) in the initial dislocation group and 37 cases (84%) in the recurrent group.

Conclusion

Our data suggest that Bankart lesion in the initial dislocation can be repaired readily by surgery, the recovery is efficient, and the recurrence would be reduced. In the recurrent Bankart lesion, special attention during surgery is required because of the displacement, adhesion, and the relax of labrocapsular ligament. Thus, in active young

adults as well as athletes, considering the high recurrence rate after the initial dislocation reported in the literature, early stabilization method may be of help in the initial dislocation.

Key word: Initial and recurrent shoulder dislocation, Arthroscopic findings, Bankart repair