

관절 절경감시하 Staple를 이용한 재발성 견관절 탈구의치료

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견관절 탈구는 우리몸의 어느 관절보다 빈번히 발생되며 그 빈도는 모든 관절 탈구의 약 50%를 이룬다고 보고되고 있다.

이중 많은 수에서 재발성 탈구로 진행되며 이에 대한 원인, 발생기전, 병리학적 소견, 치료에관한 연구가 진행되어 왔다.

특히 견관절의 재발성 전방탈구에대한 수많은 수술방법이 소개되어 왔으나 견관절의 전방 불안 원인으로 전방 관절낭 구조물에 중점을 두는 Bankart 수술법과 견갑하근(subscapularis tendon)에 중점을 두는 Magnuson-Stack 수술법으로 대별할수있다.

근래 관절경 수술의 발달은 견관절의 재발성 전방탈구에도 응용되고 있으며 관절경하에 봉합사를 이용하는 방법과 staple을 이용하는 방법으로 좋은 결과가 기대되고 있는 실정이다.

저자들은 1987년 6월 부터 1992년 2월까지 재발성 전방 견관절 탈구 환자중 관절경하에 staple을 이용한 방법으로 18예를 치료하였으며 이중 1년이상 추시관찰이 가능하였던 13예에 대하여 얻은 결과를 수술 수기와 함께 분석 발표하는 바이다.

- 1.환자의 나이는 18세부터 32세로 평균 25세였으며 한 예를 제외하고 모두 남자였다.
- 2 최초의 탈구는 전예에서 외상을 동반하였고 술전 1년 6개월에서 6년사이였으며 모든 환자에서 4회이상의 탈구 경험이 있었다.
- 3.수술후 재발견된 예는 현재까지는 없었다.
- 4.관절경 검사상 18예중 18예에서 Bankart병변이 있었으며 18예중 13예에서 Hill-Sachs 병변이 있었다.
5. 2예에서 정상견관절에 비하여 10도 및 7도 외회전의 제한이 있었다.
6. Glasgow 방법을 이용한 임상적 평가는 우수가 12예, 양호가 1예였다.
7. 감염, 내고정물 손상 및 중요 혈관 신경의 손상같은 합병증은 없었다.

이상의 결과로보아 관절경 감시하 staple을 이용한 재발성 견관절 탈구의 치료는 수술적으로 비교적 고도의 수기를 요하며 많은 합병증의 가능성이 있었으나 적절한 환자의 선택, 관절순과 인대의 보존, 정확한 수술수기 그리고 적절한 수술 후 고정 및 재활치료등으로 재발성 견관절 탈구에 대한 치료를 성공적으로 이루어 낼 수 있다고 사료되는 바이다.

Arthroscopic Staple Capsulorrhaphy for Treatment of Recurrent Shoulder Dislocation

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Various methods have been described for surgical management of patients who have recurrent anterior shoulder dislocation. In recent years, great advancements have been made in arthroscopic surgery of anterior shoulder dislocation.

From June, 1987 to February, 1995, 18 shoulders in 18 patients who experienced recurrent traumatic anterior dislocation were repaired with the arthroscopic stapling technique. Among them, 13 cases which could be followed for more than 1 year were analyzed. Postoperative follow up averaged 21 months (range 4 months to 8 years).

The results were summarized as follows:

1. Average patient age was 25 years with an age range from 18 to 32 years. All 17 cases were male and one case was female.
2. The original dislocation involved an injury in all cases. It had occurred between 18 months and 6 years before surgery. Every patient had had 4 or more recurrences.
3. Among the 18 cases, 18 cases were found to have a Bankart lesion and 13 cases, a Hill-Sachs lesion at surgery.
4. There have been no postoperative recurrences up to date.
5. Mild degrees restriction in external rotation, as compared to the contralateral shoulder, was noted in 2 patients.
6. Clinical results of 13 cases, based on the Glasgow's shoulder rating system, were 12 excellent and 1 good.
7. No instances of infection, instrument failure, or major neurovascular complications occurred in this series.

Conclusively, arthroscopic staple capsulorrhaphy is technically demanding operation with many potential complications. However, adequate patient selection, along with attention to integrity of labrum and ligament, precise surgical technique, postoperative immobilization of three weeks, and postoperative activity modification, will greatly enhance the success of arthroscopic stapling capsulorrhaphy.

Key Words: Arthroscopic stapling repair, Recurrent shoulder dislocation.

Arthroscopic Bankart Suture Repair (Morgan's technique) for the recurrent anterior dislocation)

(Problems encountered during Arthroscopic Bankart
Suture performed according to Morgan's Technique)

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We have performed Morgan's method which is one of the arthroscopic Bankart suture repairs since 1990. We report our experience and the problems encountered with this technique.

PATIENTS and METHODS

From 1990 to 1993, 23 patients with recurrent anterior shoulder instability were subjected to arthroscopic Bankart suture repair (Morgan's method).

The mean age of the patients at operation was 22.8 year; there were 17 men and 6 women. The average follow-up time was 24.7 months.

We have conducted this operation according to these indications;

- 1) The episodes of dislocation or subluxation are several times.
- 2) There is no loss of glenoid bone stock.
- 3) The patients is relatively young.
- 4) The patients has no relation to the contact sports or hard labor.
- 5) There is no multidirectional instability.

RESULTS

There had been one recurrence of dislocation which was operated on again according to the Bristow procedure. Two patients reported a single episode of re-subluxation which symptoms were not pronounced ; they received con-servative treatment.

The preoperative JOA score was 81.4 points and improved 15points up to 96.1 points postoperatively.

PROBLEMS of the TECHNIQUE

- 1) The position of the anterior portal
If the anterior portal was made at too superior point, there is a tendency that the suture pin slip on the glenoid neck more easily. So, it should be placed inferiorly (caudally) as much as possible in order to facilitate the suturing process.
- 2) The position of reattachment point of the anteroinferior glenohumeral ligament -labral complex (AIGHLC)
The reattachment point of the AIGHLC is also important. It should be reattached at the suitable point. But sometimes, AIGHLC is not clear. In such cases, we investigate the amount of tension of AIGHLC by pulling with a grasper in order to make sure the isometric point of the aighlc
- 3) The strength of the thread
When the thread is tied on the fascia of the deltoid muscle, it is difficult to determine the strength of the thread. The thread is usually tied so as to make a dimple of about 1 cm at the posterior suture point.

DISCUSSION

The technique of arthroscopic Bankart repair has been improved every year.

In terms of Morgan's technique, it is most characteristic that we need no special instrument. In our series, the postoperative results were relatively good as compared to other techniques. But still there were some difficulties when we conducted this procedure. Especially, the position of anterior portal was important factor in order to do this technique with no significant troubles. If these technical problems are overcome, Bankart suture repair (Morgan's technique) can be a useful procedure to treat recurrent anterior dislocation.