

suture anchor Bankart • 485

가 12 , 가 2 , 1
 가
 7). 1996 8 2000 7 34 (19~60) (Fig.1),
 14 , 15 13 .
 T- 1 7 5.4 . 15
 suture anchor 7 , 6 , ,
 , 10 가 ,
 Bankart 가 4 ,
 14 (15) 가 1 (Table 1).
 sulcus 2 가 9 , 3 가 6
 ,
 1 가 2 , 2 가 10 , 3 가 3 .
 4 , 5
 .
 1996 8 2000 7
 4-5 cm
 , 1 가가
 14 , 1
 3 4 1 4 Bankart Hill-Sachs
 1/3 30 (Fig. 2A).

Table 1. Causes of injury

Cause	No. of Cases
Sports (baseball, basketball, ski)	10 (66%)
Fall down	4 (28%)
Fighting	1 (6%)
Total	15 (100%)

(Fig. 2B). 2/3 2
 suture anchor (Mitek , GII AnchorTM, USA)
 11 , 9 (Fig. 2C). 1/3
 1 suture anchor

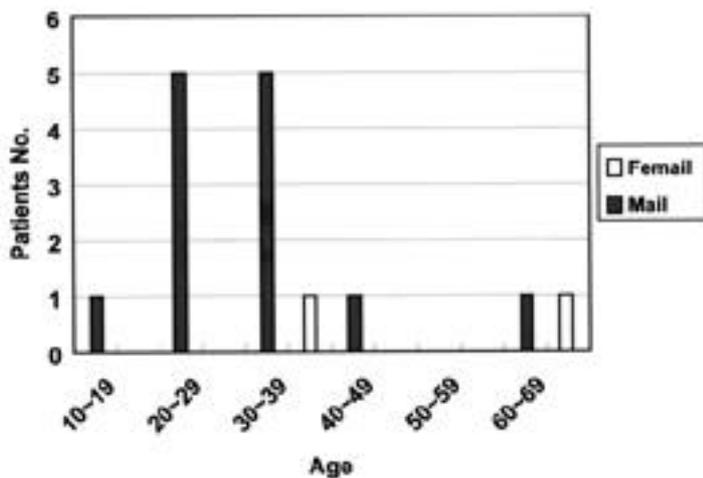


Fig 1. Age and Sex distribution

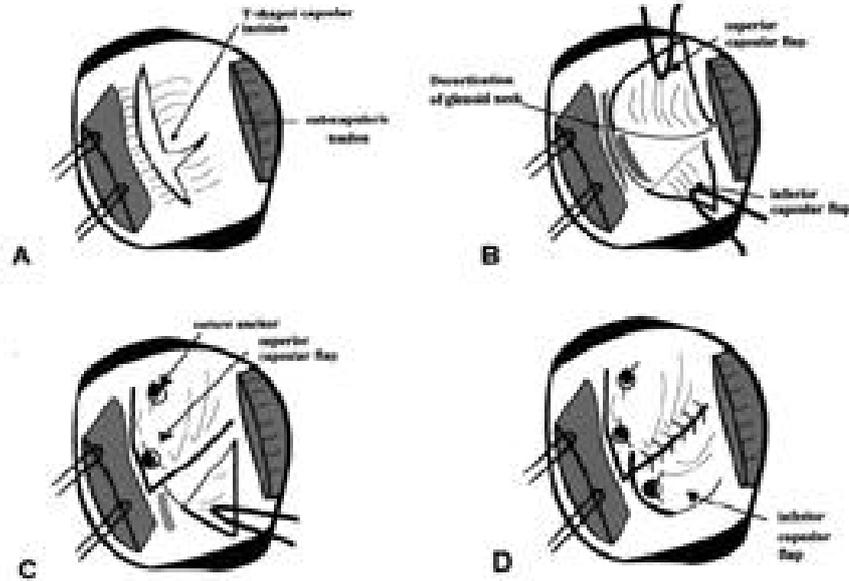
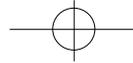
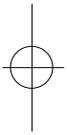


Fig 2A. Anterior view of the left shoulder T-shaped capsular incision, medial retraction of the subscapularis
2B. Anterior decortication at the glenoid neck
2C. The superior capsular flap is shifted medially, and the Bankart lesion is fixed by two anchoring suture (11 and 9 o'clock direction).
2D. The inferior capsular flap is shifted superomedially and fixed by one anchoring suture (7 o'clock direction), and sutured over the superior capsular flap.



7 1/3 Zarins¹⁷⁾ 가 가 12 (80%),
 2/3 (Fig. 가3 (20%) 가
 2D). 50 , 10 , 30 ,
 1 , 가 , 10 , 90 , 70
 , 가 , 89 , 40 69 , 39
 가 Rowe Zarins¹⁷⁾ 가 27 50 12 , 35 3
 47 , 3
 10 13 , 5 2 9.3 ,
 3 15
 , 178
 (70 -195), 59 (40 - 80) ,
 Hill-Sachs Bankart 1 , 175 (65 -
 185) 55 (40 - 75) .
 . Bankart 10 , Bankart 가 2%
 5 가 , Bankart 가 , 7%
 가 , (Table 2)(Fig. 3).
 Rowe .

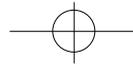


Table 2. Range of motion of shoulder joint

Cases	(degrees)		(degrees)	
1	180	175	55	50
2	70	68	60	55
3	180	173	55	55
4	195	191	55	50
5	185	175	40	40
6	187	185	65	60
7	185	178	73	70
8	190	163	65	60
9	185	185	80	80
10	185	175	55	55
11	183	176	60	55
12	195	190	50	45
13	185	181	55	45
14	187	185	55	55
15	178	175	60	55
	178	175	59	55

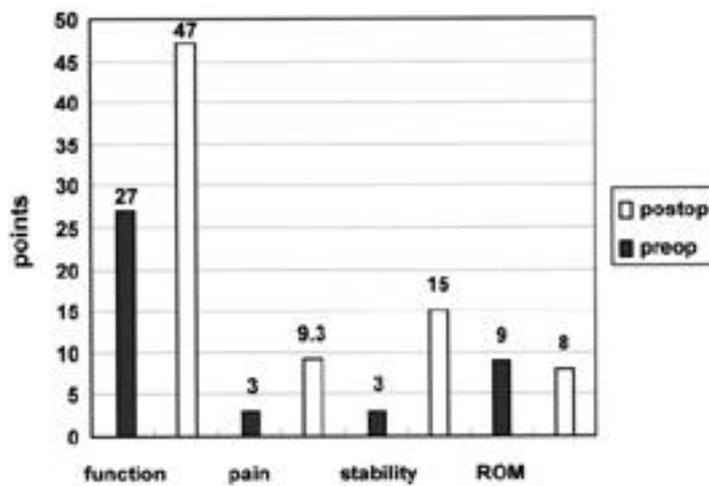
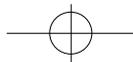


Fig 3. Clinical evaluation of the operation as the grading system of Rowe and Zarins by measuring function, pain, stability and range of motion of shoulder joint.

Bankart^{2,4)} 가 Flower⁶⁾ , Perthes¹³⁾
 , Caird⁵⁾
 . Bigliani¹¹⁾
 Bankart Rowe¹⁵⁻¹⁶⁾
 85% Bankart ,
 , Takeda⁸⁾



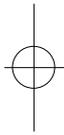


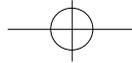
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Bankart Kvitne Jobe¹⁰⁾ 2
 , Neer Foster¹²⁾ 90 8
 (inferior capsular shift procedure)
 Altcheck¹⁾ Bankart 8 12
 , Bankart 8 12
 , Bankart 3 (Velpeau sling)
 , 3 sling
 4
 Bankart 가 5 , 7
 . Bankart
 , 30 30
 Bankart suture anchor
 가 , suture anchor
 Bankart Transosseous suture Bankart
 technique, Transglenoid suture technique, Suture anchor
 technique , Bankart
 Transosseous suture technique
 Rowe^{17,18)} 3.5%, Hovelius⁷⁾ 2%, Tamai¹⁹⁾
 2.2% , Transglenoid suture technique 가 ,
 Daniel 5%
 , Richmond⁹⁾ Suture anchor technique
 5.9% , Tamai¹⁹⁾
 8.7% Suture anchor가
 Suture anchor technique
 ,
 , Zarins²⁰⁾ 1
 3 8
 , 45
 8
 6
 90% 100%

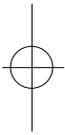
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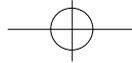
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Abstract

The Result of Modified Bankart Operation with Suture Anchor in Traumatic Recurrent Anterior Dislocation of Shoulder Joint

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Purpose : The purpose of this study was to evaluate the clinical result of modified Bankart operation repairing the Bankart lesion with capsular shifting using suture anchor in traumatic recurrent anterior dislocation of shoulder joint

Materials and Methods : All of the cases were treated with modified Bankart operation. The inferior and superior capsular flaps were advanced to the anterior aspect of glenoid neck and fixed with three suture anchors in 30 degrees abduction and external rotation of shoulder joint. Especially the inferior 1/3 capsular flap was sutured over the superior 2/3 capsular flap. We used the grading system of Rowe and Zarins as measuring function, pain, stability, range of motion of shoulder joint.

Result : The clinical results were excellent in 80%, good in 20%. The mean loss of motion at follow up study was 2% of flexion and 7% of external rotation.

Conclusion : This operative technique is useful in repairing the Bankart lesion and gaining adequate capsular tension. And the using of suture anchor could save the operation time.

Key words : Shoulder joint, Recurrent anterior dislocation, modified Bankart operation.

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