



15, 1, 2002 1

The Journal of the Korean Society of Fractures
Vol.15, No.1, January, 2002

(Bosworth Mersilene tape Bosworth)

.

< >

:

Bosworth

Mersilene

: 1996 3

2000 8

1

가

32

15

Bosworth

17

Mersilene tape

Bosworth

Weitzman criteria,

: Weitzman criteria

Bosworth

12 (80%),

1 (7%),

2 (13%),

Mersilene tape

Bosworth

15 (88%),

1 (6%),

1 (6%)

1

Bosworth

가

6.3mm

1.5mm, Mersilene

6.2mm

1.4mm

Bosworth

2

가

Mersilene tape

Bosworth

1

: Mersilene tape

Bosworth

:

, Mersilene Tape

Bosworth

:

290-3 (682-714)

Tel: 052-250-7129 Fax: 052-235-2823

E-mail: twpark@uuh.ulsan.kr





Mersilene tape

4.5mm 6.5mm cancellous screw

(Fig. 1).

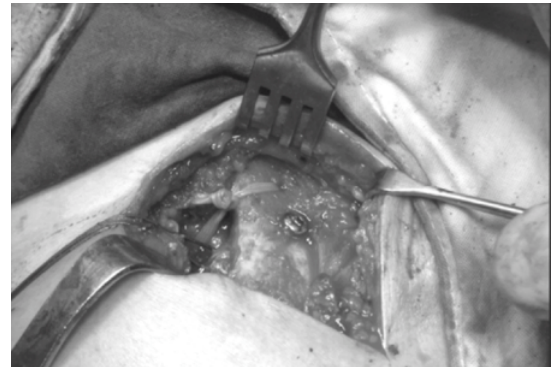


Fig 1. Drill bit was used to create the hole through the clavicle at the junction of its anterior and middle third direct above the coracoid process. Mersilene tape was passed and tightly tied. After that cancellous screw was fixed.

Bosworth
가
Bosworth Mersilene

1996 3 2001 2
32 1 32
29 (90%) , 가3 (10%)
20 63 41 , 20
. 15 Bosworth
, 17 Mersilene
32 17 (53%)가
, 8 (25%)가 , 6
(19%)
1 (3%) . 19
(59%), 13 (41%)
Rockwood12) 29 (90%)가 3
, 1 가 4 , 2 가 5
Mersilene tape Bosworth
beach-chair
Mersilene tape
1/3 1

가 가
,
Weitzman
, , , 4 가

가 ,
Bosworth 가 6.3mm
1.5mm ,
1.9mm 가 . Mersilene

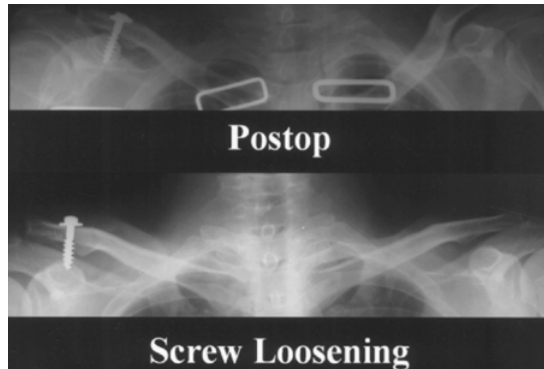


Fig 2. In patient underwent modified Bosworth without Mersilene tape, redislocation of right acromioclavicular joint occurred with screw loosening at POD 3 weeks.

Table 1. Radiological Results

Procedure	M.Bosworth	M.Bosworth + M-Tape
Preop	6.3	6.2
Postop	1.5	1.4
Last F/U	1.9	1.6

Table 2. Clinical Results

Procedure	M.Bosworth	M.Bosworth + M-Tape
Excellent	12	15
Good	1	1
Fair	0	0
Poor	2	1

6.2mm 1.4mm
1.6mm 가 (Table 1). 가 Weitzman 가
Bosworth 12 가 1 가
2 가 가 Mersilene tape
Bosworth 15 가 1 가
1 가 가 (Table 2).
Bosworth 2
가 (Fig. 2)
1
1
Mersilene tape Bosworth
1

(Fig. 3).

1

12).
3 가 가
가 9).
25
12). Sundaram
(pressure symptom),
high-riding
13)
3



Fig 3. In patient underwent modified Bosworth augmented with Mersilene tape, no dislocation of left cromioclavicular joint occurred despite of screw loosening at POD 4 weeks. Last follow-up roentgenogram revealed that left coracoclavicular distance was the same as right coracoclavicular distance.



62 • / 15 1

가

Rockwood ¹²⁾

가

Bosworth

8

가

Mersilene tape

Bosworth³⁾, Alldredge¹⁾Bearden ²⁾ 2, Goldberg ⁷⁾

Dacron

, Graves

Foster⁸⁾

1

1

Kirschner

Vicryl

Bosworth

가

Mersilene tape

screw loosening

. Sundaram

¹³⁾

가

Mersilene tape

Bosworth

가

Mersilene tape

mersilene tape

. David ⁵⁾

가

GORE-TEX

3cm

1/3

REFERENCE

(tension)

wire passer

1/3

Mersilene tape

1,4,6,7,10,11,14)

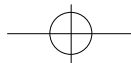
Mersilene tape

Bosworth

- 1) **Alldredge RH:** Surgical treatment of acromioclavicular dislocation(abstract). J Bone Joint Surg, 47A: 1278, 1965.
- 2) **Bearden JM, Hughston JC and Whatley GS:** Acromioclavicular dislocation: method of treatment. Am J Sports Med, 1: 5-17, 1973.
- 3) **Bosworth BM: Acromioclavicular dislocation:** end results of screw suspension treatment. Ann Surg, 127: 98-110, 1948.
- 4) **Cheon CH, Park KH, Han HJ, Cho DM:** Review of modified phemister method for complete acromioclavicular dislocation. J of Korean Orthop



- Assoc, 27: 1052-1059, 1992.
- 5) **David SM and Mark JL:** Acromioclavicular separation. Reconstruction using synthetic loop augmentation, Am J Sports Med, 23: 1.
- 6) **Dust WN and Leczner EM:** Stress fracture of the clavicle leading to non-union secondary to coracoclavicular reconstruction with dacron. Am J Sports Med, 17: 128-129, 1989.
- 7) **Goldberg JA, Viglione W, Cumming WJ, Waddell FS and Ruz PA:** Review of coracoclavicular ligament reconstruction using dacron graft material. Aust NZJS, 57: 441-445, 1987.
- 8) **Graves SE and Foster BK:** Absorbable suture lasso in the treatment of complete disruption of the acromioclavicular joint(abstract). J Bone Joint Surg, 66B: 789-790, 1984.
- 9) **Larson E, Bjerg-Nielsen A and Christensen P:** Conservative or surgical treatment of acromioclavicular dislocation. A prospective, controlled, randomized study. J Bone Joint Surg, 68A: 552-555, 1986.
- 10) **Neviaser JS:** Acromioclavicular dislocation treated by transference of the coracoacromial ligament. A long-term follow-up in a series of 112 cases. Clin Orthop, 58: 57-68, 1968.
- 11) **Park SW, Lee HK, Park JH, Lee HK:** Clinical evaluation of surgical treatment for complete acromioclavicular dislocation. J of Korean Orthop Assoc. 24: 1655-1660, 1989.
- 12) **Rockwood CA Jr, Williams CR and Young DC:** Fractures in adults. 4th ed, Philadelphia, JB Lippincott Co: 1341-1413, 1996.
- 13) **Sundaram N, Patel D.V. and Porter D.S.:** Stabilization of acute acromioclavicular dislocation by a modified bosworth technique: a long-term follow-up study. British Journal of Accident Surgery. 23: 3.
- 14) **Weaver JD and Dunn HK:** Treatment of acromioclavicular injuries, especially complete acromioclavicular separation. J Bone Joint Surg, 54: 1187-1197, 1972.



Abstract

Comparison of Surgical Treatment for Acromioclavicular Joint Dislocation

Tae-Woo Park, M.D., Sung-Do Cho, M.D., Yong-Sun Cho, M.D., Bum-Soo Kim,
M.D., Sogu Lew, M.D., Jong-Ken Woo, M.D.

*Department of Orthopaedic Surgery, Ulsan University Hospital,
University of Ulsan College of Medicine, Ulsan, Korea*

Purpose : To evaluate the result of modified Bosworth method augmented with Mersilene tape(MBM) compared with modified Bosworth method(MB).

Materials and Methods : Thirty two acromioclavicular dislocation were treated with MB(15 cases) or MBM(17 cases) and the mean follow up period was 26 months(12-43 months). We assessed the radiological and clinical evaluation(X-Ray & Weitzman Criteria) and complications.

Results : Twenty nine cases(91%)(MB 13, MBM 16) were " excellent " or " good " according to the Weitzman criteria.

At last follow-up, mean difference of the coracoclavicular distance between the normal and the injured site were 1.9mm(MB) and 1.6mm(MBM) and two cases were developed the arthritis, and then performed the distal clavicle resection.

Conclusion : Modified Bosworth method augmented with Mersilene tape is a good option for acromioclavicular dislocation in stabilizing the joint, even if the screw loosening occurs with early postoperative ROM.

Key Words : Acromioclavicular Joint, Dislocation, Modified Bosworth method using Mersilene tape

Address reprint requests to _____

Sung-Do Cho, M.D.

290-3 Cheonha-Dong, Dong-Ku, Ulsan 682-714 Korea

Department of Orthopedic Surgery, Ulsan University Hospital,
University of Ulsan College of Medicine

Tel: +82-52-250-7129 Fax: +82-52-235-2823

E-mail: twpark@uuh.ulsan.kr