

# Phemister

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< >

: Phemister

가

1 가 37 Phemister 53  
6 Kenny-Howard  
11.5 (S.D.:1.2 ) 6  
가 , 90.

: 150 (S.D.:7.2), 71 (S.D.:12.6), 90

77 (S.D.:8.9), T8  
stress 6.3mm(S.D.:3.1mm), 0.6mm(S.D.:1.4mm)

1.0mm(S.D.:1.8mm) . 2 4mm 가, 2 , 3

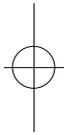
가 , 2 K-

7 가 , 3 가

: 6 10

: , , , , Phemister

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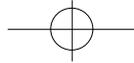


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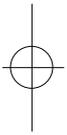
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2001

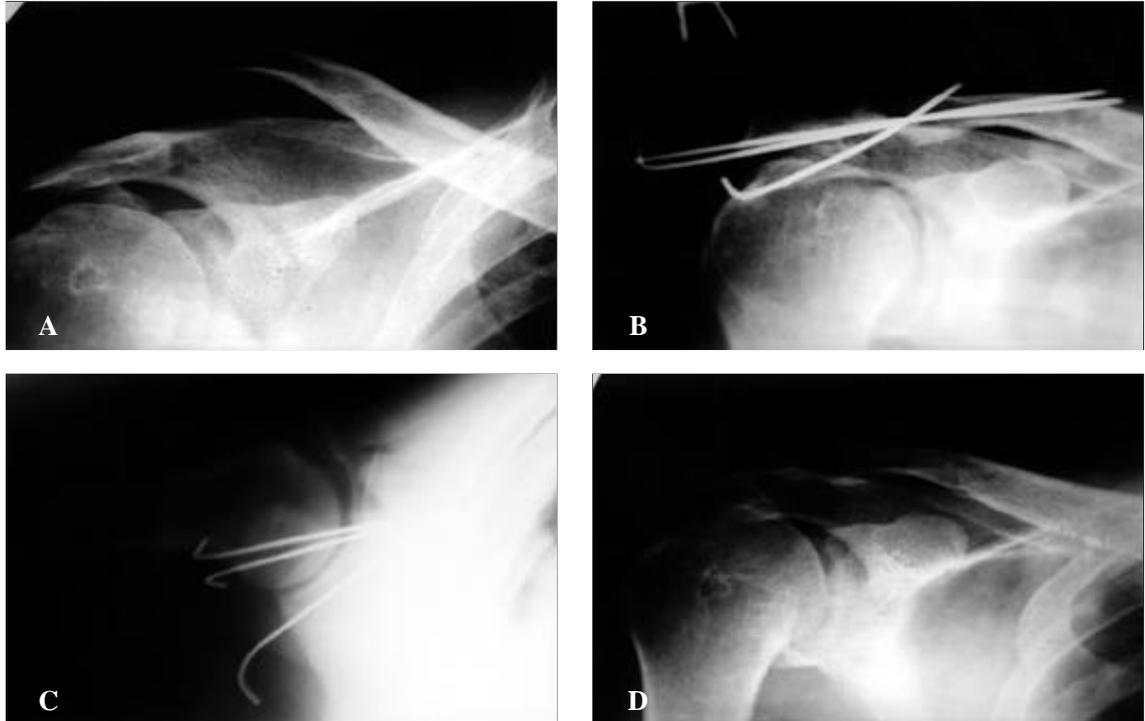
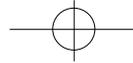
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1cm  
5cm  
Langer's line  
#2 ethibond  
1.6mm K-  
2  
1 (Fig. 1).  
Phemister 가  
( 11.5 , S.D.:1.2 )  
가  
hole #2 ethibond  
4-5  
Kenny-Howard  
10-12 ( 11.5 , S.D.:1.2 )  
6  
140°  
K-  
K-  
1. 1996 1 2000 1 4  
3.  
, Allman  
Phemister  
III 53 1  
가가 37 가30 , , 90°  
가7 , 20 64 38  
25 , 12 ,  
가 20 (54%) 가 stress  
가12 , 가5  
가1 , 1 ,  
1 , 3 ,  
가1 가  
2 가27 (73%)  
,4 4  
2. 60° (S.D.:7.2), 71 (S.D.:12.6), 90 150





**Fig 1.** A: A 40-year-old male patient had a type III acromioclavicular dislocation. B: A postoperative x-ray after treated by modified Phemister technique. C: A axillary lateral view. To prevent rotation of A-C joint, one pin was inserted at posterolateral aspect of acromion. D: Last follow up at one year after surgery. The reduction was well maintained.

77 (S.D.:8.9), T8 .

stress 6.3mm(S.D.:  
3.1mm), 0.6mm(S.D.:1.4mm)  
1.0mm(S.D.:1.8mm)

2 K- , 2  
, 3

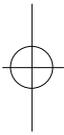
가 (Fig. 2),  
7 가

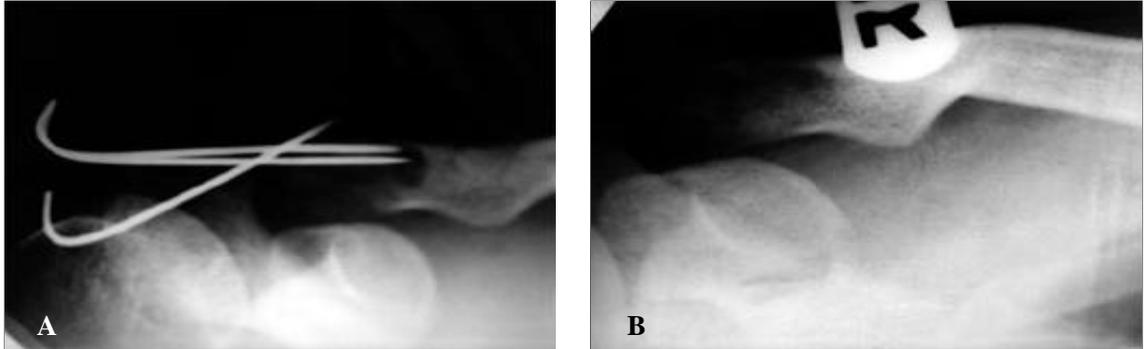
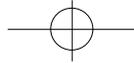
2

(Fig. 3),



**Fig 2.** A 37-year-old man had been treated by modified Phemister technique. The radiograph shows calcification at coracoclavicular ligament area, but clinical symptom was absent.



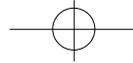


**Fig 3.** A: A 32-year old man had developed pin tract infection with osseolysis of distal clavicle.  
 B: The lesion was healed at last follow up.



2 4mm 가  
 1 12 , 가  
 , 1  
 4 , , 가 가  
 , ,  
 ,  
 , Imatani  
 7)  
 가 50% 가 , Rockwood 12)  
 가  
 5mm 가  
 ,  
 ,  
 Taft 16)  
 가  
 , 가  
 가  
 Allman<sup>1)</sup> Tossy<sup>17)</sup>  
 3가 ,  
 가 III  
 . Rockwood Green<sup>11)</sup> 3가 25 Rockwood  
 가 6가 3가 , Larsen 9)  
 Horn 6)  
 가 가 가





3,4,8,10,15)

가

Bannister 2)

6

가

modified Phemister

가

Eskola 5)

K-

K-

K-

( 11.5 )

가

K-  
K-  
8

10

6

1.6mm

K-

K-

Horn

4-5 drill hole

### REFERENCES

Pent over vest

Phemister

, K-

, K-

7 가

3

. 3

가

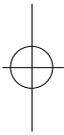
Larsen 9)

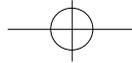
9,13,14,18)

Phemister

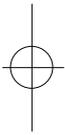
6-8

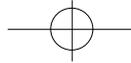
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## Abstract

## Modified Phemister Operation for Acromioclavicular Dislocation

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**Purpose** : To evaluate the clinical results after modified Phemister operation for complete dislocation of acromioclavicular joint.

**Materials and Methods** : Thirty-seven cases of Fifty-three cases complete dislocation of acromioclavicular joint which were treated modified Phemister operation, follow up for at least one year, were evaluated. After operation, applied Kenny-Howard brace for six weeks and removed the inserted pins at ten to twelve weeks postoperatively. The ROM exercise was started at postoperative six weeks and meticulous ROM exercise was begun at pin removal. The clinical results were evaluated with range of movement, comparison of the coracoclavicular distance after surgery with that of follow up, and complications.

**Results** : The range of motion were forward elevation 150 degree, external rotation 71 degree, external rotation at 90 degree abduction 77 degree, and internal rotation T8. The comparison of coracoclavicular distance after surgery(0,6mm) with that of follow up(1.0mm) showed no significant ligament laxity. The complication were subluxation in 2 cases, heterotrophic calcification in 3cases, broken K-wire in 2cases, pin site infection in 7cases and distal clavicle osteolysis in 3cases, which were healed at follow up radiographically.

**Conclusion** : To prevent of redislocation of acromioclavicular joint, we tried to insert the pin during relatively long period for sufficient healing of ruptured coracoclavicular ligament. Although immobilization period was relatively long period, clinical results were good.

**Key Words** : Shoulder joint, acromioclavicular joint, complete dislocation, trauma,  
Modified Phemister operation

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