

13, 4, 2000 10

The Journal of the Korean Society of Fractures
Vol.13, No.4, October, 2000

(3)

- -
. .

< >

3
가

가

2

2

3

K-

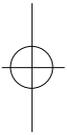
5 - 10 %²⁾,
2 - 10 %¹³⁾ 가
3)
가

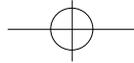
11 - 28 %⁹⁾

:

1

Tel : (02) 450-9686
E-mail : ahnsuh@kkucc.konkuk.ac.kr





가 , 가 가 5
 25°, 135° , 1
 20°, 135°,
 3 (Terrible triad of elbow fracture and 30°, 60° (Fig1-B). Morrey
 dislocation) 가 11)
 2
 2.
 15 가
 1. (Fig2-A)
 45 Regan Morrey 13) 2
 , Mason 7) 3
 (Fig1-A) 13) 1
 Regan Morrey 7) 3
 , Mason
 2 (Fig2-B). 3
 (Pulled-out K- 6 6
 method) 2 (Fig2-C). 4
 Long arm dial-lock hinged brace 4 25°
 45° 105° 125°, 25°
 3 1 4
 45°, 120° (Fig2-D),
 4 10°, 135°, 40°

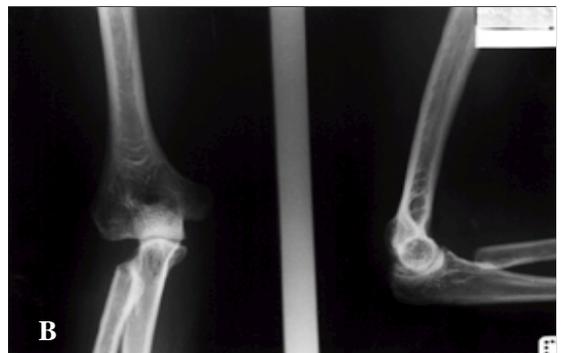
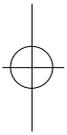


Fig 1A. The radiographs of right elbow joint of 45 year old female patient show posterior dislocation of elbow joint with fracture of radial head and coronoid process

1B. Postoperative 12 months, radiographs show excised radial head, intact ulnohumeral joint and no evidence of ectopic ossification



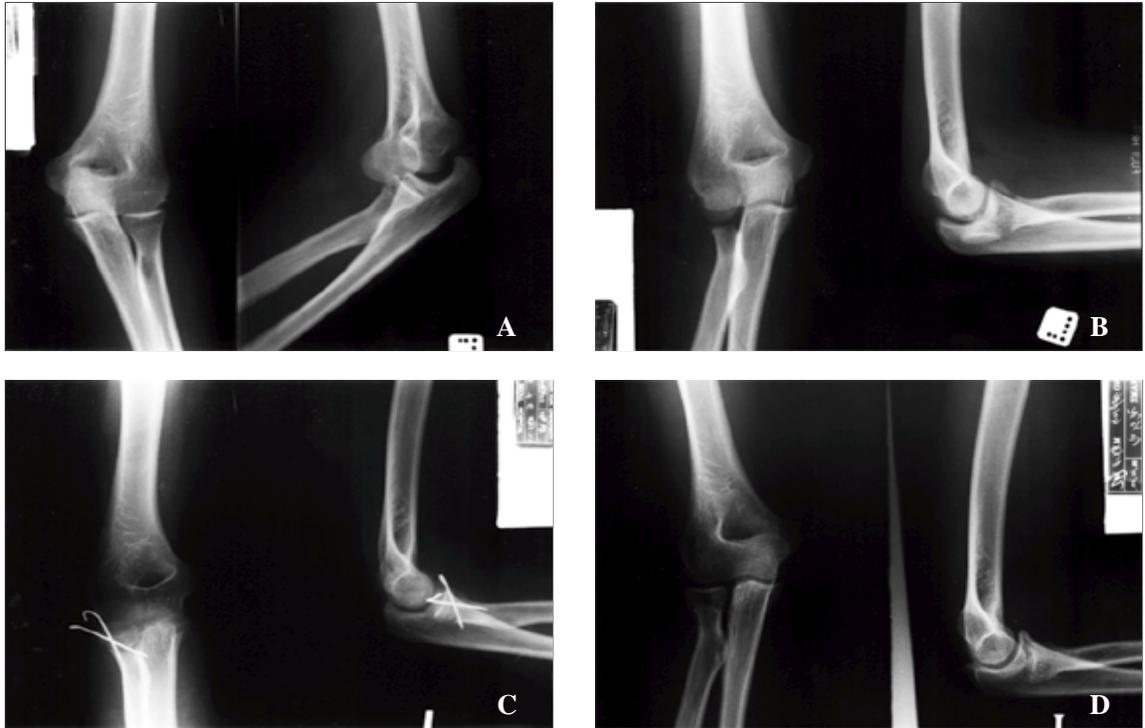
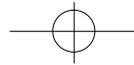
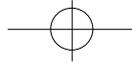


Fig 2A. The radiographs of left elbow joint of 15 year old female patient show posterior dislocation of elbow joint with linear fracture of radial neck and coronoid process
2B. After closed reduction, radiographs show displaced radial head and avulsion fracture of coronoid process
2C. Postoperative 6 weeks, radiographs show delayed union of radial head. At this time K-wires were removed and exercise was started
2D. Postoperative 16 months, radiographs show completely united radial head and intact elbow joint



11) . Morrey 가 2).
 가
 , Regan Morrey¹³⁾
 1 3
 (Terrible triad of
 elbow fracture and dislocation) 3). 40- 45. 가
 11). 3



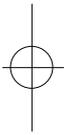


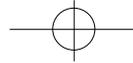
1014 • / 13 4

13). 1 Noble⁹⁾ 4 30.
 35%
 1 , 92%
 (Pulled-out method) , 2 ,
 12%
 Mason⁷⁾ 1
 2-4 McDougall
 , 2 가 White¹⁰⁾
 , Mason⁷⁾ 1/4 ,
 , Adler
 Shaftan¹⁾ 가 ,
 Gaston⁶⁾ 12 가 , 가 ,
 50% 가
 . McLaughlin⁸⁾
 48 가 ,
 , Chamley⁴⁾ 가
 2 , Adler Shaftan¹⁾
 . Broberg Morrey²⁾

REFERENCES

- 1979
 5). 3
 48 , 2
 K-
 . 2 1
 Osborne Cotterill¹²⁾
 가
 가
 . Broberg
 Morrey²⁾ 4%
 , 29% 15%
 . Mehlhoff
- 1) **Adler JB and Shaftan GW** : Radial head fracture, Is excision necessary? *J Trauma*, 4: 115-136, 1964.
 - 2) **Broberg MA and Morrey BF** : Result of treatment of fracture-dislocation of the elbow. *Clin. Orthop.* 216: 109-119, 1987.
 - 3) **Charles A Rockwood Jr, David PG and Robert WB** : Fracture and dislocation of the elbow. *Fracture in adult.* 970-1015, 1996.
 - 4) **Charnley J** : The closed treatment of common fractures. Edinburgh, *E & S Livingstone*, 1950.
 - 5) **Coleman DA, Blaire WF and Shurr D** : Resection of the radial head for fracture of the radial head. *J Bone Joint Surg*, 69-A: 385-392, 1987.
 - 6) **Gaston SR, Smith FM and Baab OD** : Adult injuries of the radial head and neck: Importance of





- time element in treatment. *Am. J Surg*, 78: 631, 1949.
- 7) **Mason ML** : Some observations on fracture of the head of the radius with a review of one hundred cases. *Br J Surg*, 42: 123-132, 1954.
- 8) **McLaughlin HL** : Some fracture with a time limit. *Surg Clin North Am*. 35: 553, 1955.
- 9) **Mehlhoff TL, Noble PC, Bennett JB and Tullos HS** : Simple dislocation of the elbow in the adult. *J Bone Joint Surg*. 70-A: 244-249, 1988.
- 10) **Morrey BF and EY Chao** : Biomechanical study of the elbow following excision of the radial head. *J Bone Joint Surg*. 61-A: 63-68, 1979.
- 11) **Morrey BF** : The elbow and its disorder. second edition: 383-404
- 12) **Osborne, Geoffrey and Cotterill Paul** : Recurrent dislocation of the elbow. *J Bone Joint Surg*. 48-B: 340-346, May. 1966.
- 13) **Regan and Morrey BF** : Fracture of the coronoid process of the ulna. *J Bone Joint Surg*. 71A: 1348-1354, 1989.

Abstract

Posterior Dislocation of Elbow Joint with Fracture of Radial Head and Coronoid Process (Terrible triad of Elbow Fracture and Dislocation) - case report-

Eui-Hwan Ahn, M.D., Sung-Tae Lee, M.D. and Hyun-Sik Ahn, M.D.

Department of Orthopaedic Surgery, College of Medicine, Konkuk University, Seoul, Korea

Dislocation of the elbow with fracture of the radial head and the coronoid process is a complex injury that includes severe damage to both soft tissue and bone. The above injury is named as 'terrible triad of elbow fracture and dislocation'. This injury is very rare and difficult to treat and this combined lesion has been reported to have a worse prognosis than either of the single injury. The complications of ectopic ossification, recurrent dislocation, and loss of motion are recognized as a source of considerable concern to the treating orthopaedic surgeon. Many authors emphasized the importance of fixation of coronoid process. The proper management of radial head fracture is controversial. Whatever method used, the elbow must be stable enough to permit early motion.

We treated 2 patients who sustained posterior dislocation of elbow with fracture of radial head and coronoid process. First case was treated by closed reduction for dislocation of elbow immediately. After 2 days, radial head was excised and coronoid process was fixed with pulled-out technique. Second case was treated by closed reduction for dislocation of elbow immediately. After 3 days, radial head was treated with open reduction and internal fixation with K-wire and teared anular ligament was repaired. Clinical result of both cases was good

Key words : Elbow, Fracture and Dislocation

