

고령환자의 상완골 간부 골절에서 저접촉 압박 금속판과 잠김 압박 금속판과의 비교

허창룡·손원용·문준규·한상환·홍재영·천성광

고려대학교 의과대학 정형외과학교실

목 적: 고령의 환자에서 발생한 상완골 간부 골절 19예에서 저접촉 압박 금속판과 잠김 압박 금속판으로 고정된 환자의 결과를 비교하였다.

대상 및 방법: 60세 이상이며 금속판을 이용한 관혈적 정복 및 내고정술을 시행받고 1년 이상 추시 가능하였던 총 19예의 환자를 대상으로 후향적 연구를 시행하였다. 방사선학적 평가, 임상적 평가 및 내고정물을 비교하였다.

결 과: 저접촉 압박 금속판과 잠김 압박 금속판을 이용한 환자 각각 1예에서 금속판의 이완을 보였고, 나머지 전 예에서 완전 유합을 보였다. 유합 기간과 유합율은 두 군간의 통계학적 차이는 없었고, 임상적 평가와 금속판 비교에서도 의미 있는 차이는 없었다. 내고정물 간의 이완이 발생한 저접촉 압박 금속판 1예의 경우 재수술을 시행하였으며, 잠김 압박 금속판 1예의 경우는 보존적 치료로 완전 유합을 얻었다.

결 론: 고령의 상완골 간부 골절에서 두 금속판을 이용한 결과의 비교에서 유합률의 차이는 없었다. 이는 내고정물의 선택보다 금속판의 길이, 골편 당의 적절한 수의 나사못과 피질골의 관통 등의 생역학적 원칙이 더 중요한 것으로 생각되었다.

색인 단어: 상완골, 간부 골절, 골다공증, 저접촉 압박 금속판, 잠김 압박 금속판

Comparison of LC-DCP versus LCP for Internal Fixation of Humeral Shaft Fractures in Elderly Patient

Chang-Yong Hur, M.D., Won-Yong Shon, M.D., Jun-Gyu Moon, M.D., Sang-Hwan Han, M.D.,
Jae-Young Hong, M.D., Sung-Kang Chun, M.D.

Department of Orthopedic Surgery, Korea University College of Medicine, Seoul, Korea

Purpose: To compare outcomes of humeral shaft fractures fixed with locking compression plate and those fixed with dynamic compression plate in elderly patients.

Materials and Methods: Nineteen consecutive elderly patients with a fracture of the humeral diaphysis were evaluated retrospectively. Ten patients had been fixed with LC-DCP, and nine had been fixed with LCP. Radiological and clinical results were compared and comparison of implants was done.

Results: Loosening of the plate occurred in one case each from the LCP group and the LC-DCP group. The rest of the patients achieved union uneventfully without any complications. Union rate, clinical score and hardware were not significantly different between the two groups. One patient who developed loosening in the LC DCP underwent reoperation whereas one patient with loosening in the LCP was successfully managed conservatively.

Conclusion: Principle of fracture fixation was more important than plate selection in humeral shaft fracture of elderly patient.

Key Words: Humerus, Shaft fracture, Osteoporosis, LC-DCP, LCP

서론

2004 4 LCP 가

5 가 6

4.5 mm

4.5 mm 5.0 mm

가 (narrow)

가 1,7)

5), 가 11)

22), 가 2

2), Schuhli

가 (LCP; Lock- 17,25)

ing compression plate, Synthes, USA) 8,9)

Constant Murley Shoulder 4,22)

SPSS 10.0

Chi-Square test

8-10,13,14,22)

결 과

19

1

가 13.1

(8~28), 11.1 (5~17)

(p>0.005).

가 Constant

Murley Shoulder 72.2 (3

4~97), 74.5 (54~98)

(p>0.05) (Table 1).

9

5, 14

66.8 (60~86)

5, 12

2, 14

2, 4

, 1

6.6 (5~8) 8.3 (7~12)

5.7 (4~6) 6.1

(5~7)

6.3 (4~8) 5.6 (4~6), 5.2 (4~6)

5.8 (5~6) AO

4.7 mm LCP 4.5 mm

1

(Fig. 1),

Table 1. Comparison between LC-DCP (Group A) and LCP (Group B) group

Group	Union rate	Time to union	No. of holes in plates	No. of cortical purchased (dis/prox)	No. of screws	Width of plate (B/N)	C.M. score
A (10)	9 (90%)	13.1 wks	6.6	Proximal 6.3/distal 5.2	5.7	4.7	72.2
B (9)	9 (100%)	11.1 wks	8.3	Proximal 5.6/distal 5.8	6.1	4.5	74.5
p-value	>0.05	>0.05	>0.05	>0.05	>0.05	>0.05	>0.05

C.M score: Constant Murley score, B/N: Broad/narrow.

Group	Delayed union	Non union	Loosening	Hardware failure
A (10)	1	1	1	0
B (9)	1	0	1	0
p-value	>0.05	>0.05	>0.05	>0.05

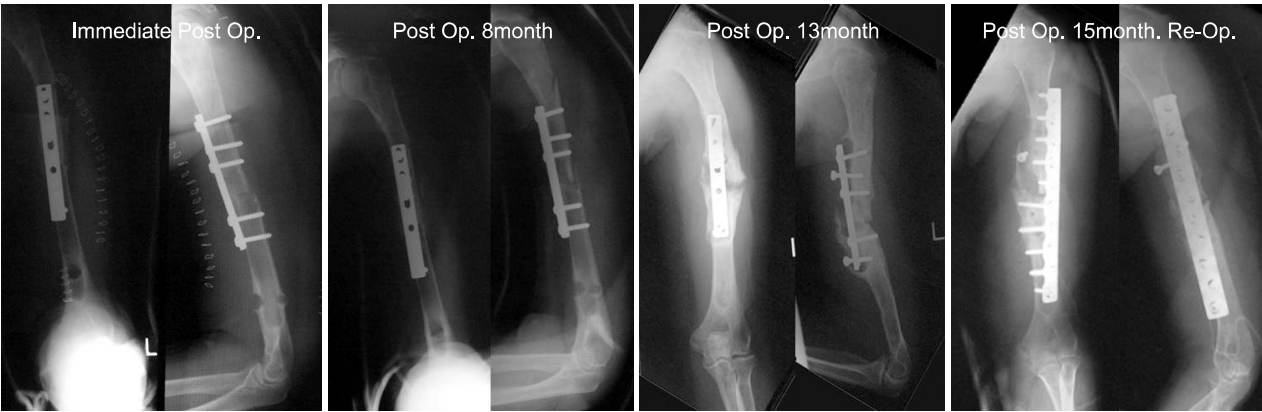


Fig. 1. Postoperative radiographs show development loosening of LC-DCP. Follow-up radiographs show progress of loosening and reoperation.

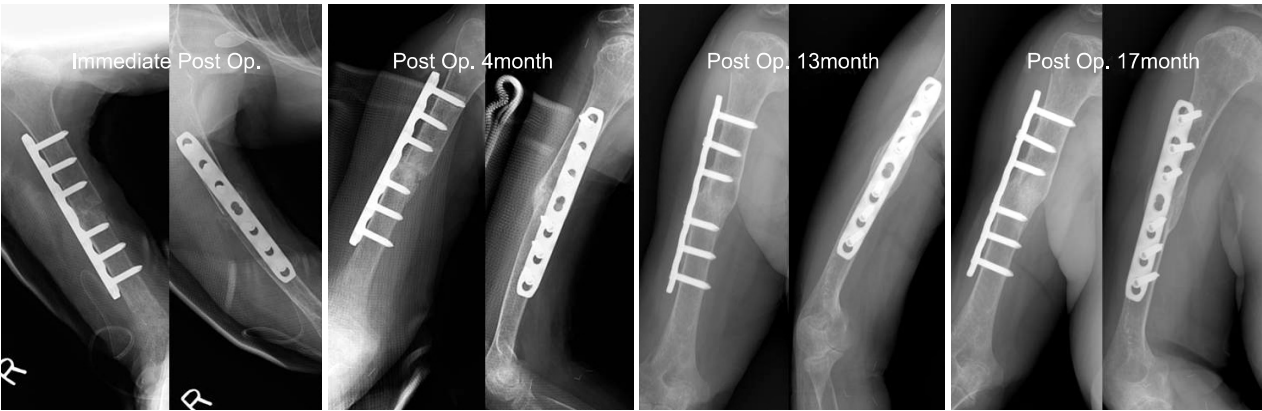


Fig. 2. Postoperative radiographs show loosening of LCP. Follow-up radiographs shows union of fracture site without further loosening.

가

가 ,

22)

21)

가

1

C-

20 ~ 40

, 가

19,25,26)

가

(saw

가

가

가

1

가

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