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= Abstract =

## The Operative Treatment of Subtrochanteric Fractures of the Femur

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**Purpose :** The authors have investigated the subtrochanteric fractures, which were treated operatively using variable internal fixation devices to determine the clinical results according to the fracture types and internal fixation devices.

**Materials and Methods :** We have reported 18 cases of subtrochanteric fractures, which were treated operatively using variable internal fixation devices from October, 1992 to December, 1997. fourteen cases were male and 4 cases were female. Eight cases were type I, 5 cases were type II and 5 cases were type III by Fielding's classification. Of fixation devices, 13 cases were DHS, and 5 cases were interlocking intramedullary nail. The mean duration of follow up was 1 year and 6 months.

**Results :** The mean duration of bony union was 20.3 weeks, and there was no significant difference between fracture types, or between internal fixation devices. Of the 18 cases, 4 complications(22%) were occurred ; delayed union(1 case), nonunion(1 case), and varus deformity(2 cases).

**Conclusion :** The internal fixation devices should be chosen adequately according to the

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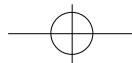
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fracture type in subtrochanteric fracture of the femur. Also, additional bone graft was necessary for posteromedial cortical defect to decrease complications, in cases of nail-plate devices especially.

**Key Words** : Femur, Subtrochanteric fractures, Operative treatment.

1.		21	82	50
가	, 가	14	가 4	가
10 (71%)		30	40	.
가	.	가		
2.		18	가 9 (50%),	4
(22%),		4	(22%),	1 (6%)
가	.	9	7 (78%)	30
40		.		
3.		Fielding		
Type I 8		가	Type II	III가 5
(Table I).				
4.		9	13	
(3 ),		(5 ),	(2 ),	
(2 ),		(1 )	.	
1992	10	1997	12	5 2
가		18	.	
1		6		

**Table 1.** Number of cases by Fielding's classification.

Type	No. of cases
1	8
2	5
3	5
Total	18



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**Table 2.** Internal fixation devices.

Device	No. of cases
DHS	13
Interlocking IM nail	5
Total	18

**Table 4.** Complications.

Complication	No. of cases
Non-union	1
Delayed union	1
Varus deformity	2
Total	4 (22%)

5. 15 (1 28 )

6. ( DHS ; dynamic compression hip screw-plate ) 13 , (interlocking intramedullary nail) 5

Fielding type I, II , Fielding type III

7. 11.3 가 11.5 ,

10.2

1.

20.3

20 , 21.4 (P=0.649).

Type Fielding type I 18.8 , type II 21.4 , type III 20.8 (P=0.30).

가 20.2 20.9

2.

18 4 (22%) , 1 , 1 , 2 (Table III). 4 3

가 DHS Fielding type I, II

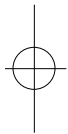
1 Fielding type II , 가

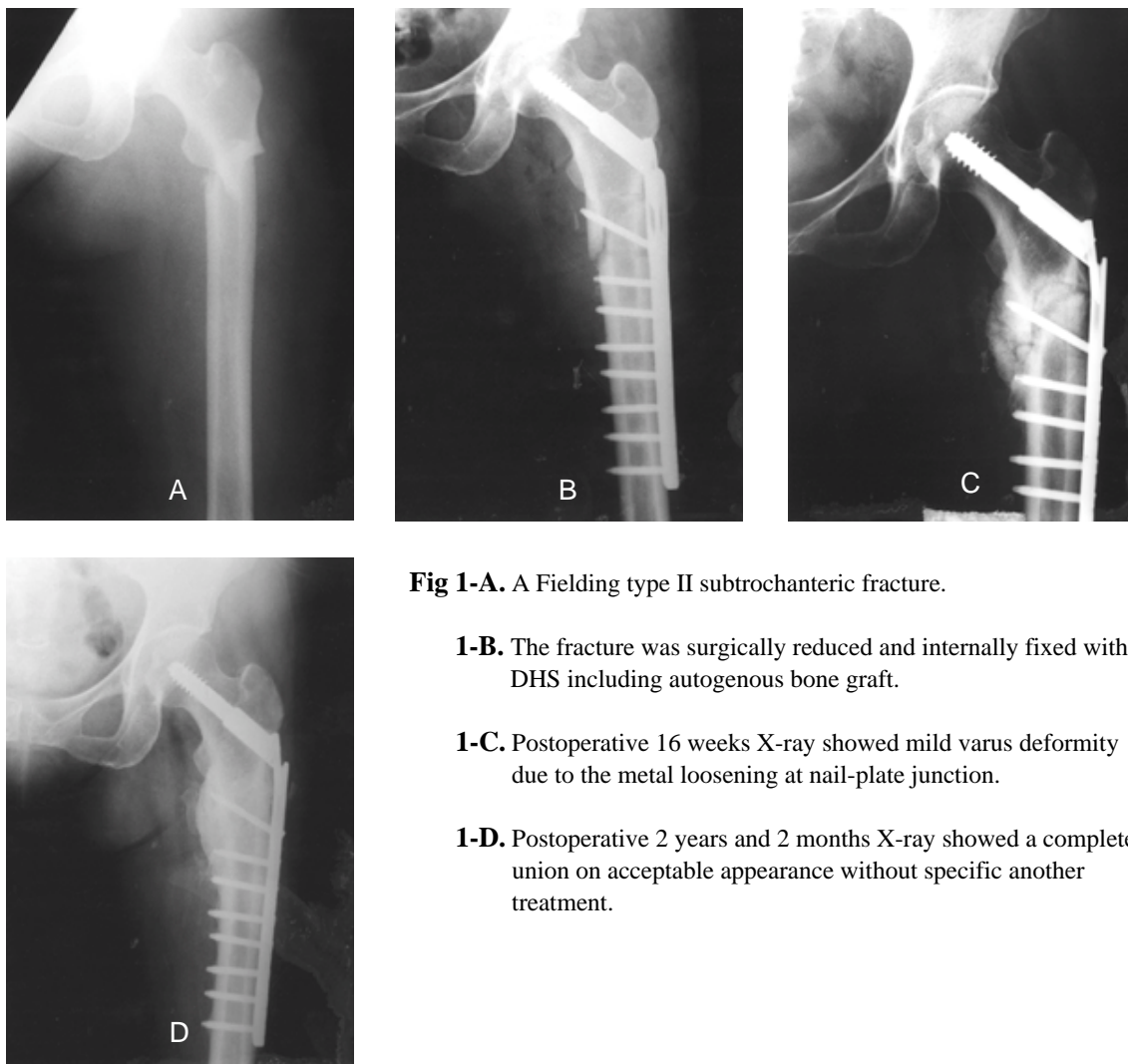
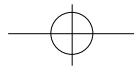
DHS 16 nail-plate junction

(Fig. 1).

1 Fielding type III , 6 가

25 가 33





**Fig 1-A.** A Fielding type II subtrochanteric fracture.

**1-B.** The fracture was surgically reduced and internally fixed with DHS including autogenous bone graft.

**1-C.** Postoperative 16 weeks X-ray showed mild varus deformity due to the metal loosening at nail-plate junction.

**1-D.** Postoperative 2 years and 2 months X-ray showed a complete union on acceptable appearance without specific another treatment.

2,6),  
2)

가

가

가

,

가

가

11 (61%) 30 40

heimer

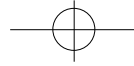
<sup>13</sup>, Russell-Taylor

Fielding

<sup>4</sup>), Seins-

Fielding

type I 가



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가 , 가

가

Fielding type I, II

가 가

Fielding type I, II

Fielding type III

가 7)

15 , 13.3 ,

9) 10)

Boyd Griffin type III 16

16.8 , type IV 20 18.2

가

(nail-plate) (intra- 가 4),

medullary nail) 가 가

가 20 ,

21.4 ,

Fielding type I 18.8 , type II 21.4 , type III 20.8

가 "

가 3,5,13) Fielding<sup>2)</sup> 8 5), 14) 12.9 ,

11) 10.5

11.3

가 load-bea-

ring device

Kuntscher nail

가 Zickel<sup>15,16)</sup> Seinsheimer<sup>13)</sup> 19%, 7%

, Fielding<sup>3)</sup> 20%

4 (22%)

가 1 ,

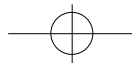
1 , 2

184 가

가 가 2 가

Schatzker Waddell<sup>12)</sup>

가 , 6 가



- 가
- 1992 10 1997 12 5 2
- 18
1. 20.3 ,  
20 ,  
21.4 , Fielding type I  
18.8 , type II 21.4 , type III 20.8 .  
2. 18 4 (22%)  
, 1 ,  
1 , 2 .  
3.
- 가
- 가
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