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= Abstract =

Treatment of Supracondylar Fracture of the Femur using the Supracondylar intramedullary Nail under the Arthroscopy (Preliminary Report)

Suk-Woong Yoon, M.D., Dong-Ha Kang, M.D., Tae-Sung Hwang, M.D., Jeong-Il An, M.D.

Department of Orthopedic Surgery, Seoul Red Cross Hospital, Seoul, Korea

Supracondylar nailing is one of the treatment methods for supracondylar fractures of the femur but it needs arthrotomy. We introduce a new technique of supracondylar nailing under the arthroscopy without arthrotomy. It is closed reduction and intramedullary supracondylar nailing under the arthroscopic control. The potential benefits of this method are decreased unnecessary soft tissue dissection, excellent intraarticular visualization and reduction, decreased blood loss and shortened operative time and postoperative recovery.

We performed this new technique on 4 cases of supracondylar fractures of the femur.

The average follow up period was 14(12-18)months.

The results were as follows;

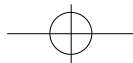
1. Among the 4 cases, 3 cases were AO type A and 1 case was AO type C.
2. All cases showed bony union and average range of knee motion was 110 degrees.
3. The operation time ranged from 60 minutes to 170 minutes and averaging 110 minutes.

Key Words : Femur, Supracondylar fracture, Arthroscopy, Intramedullary supracondylar nail.

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Tel : (02) 398 - 9441 Fax : (02) 398 - 9439



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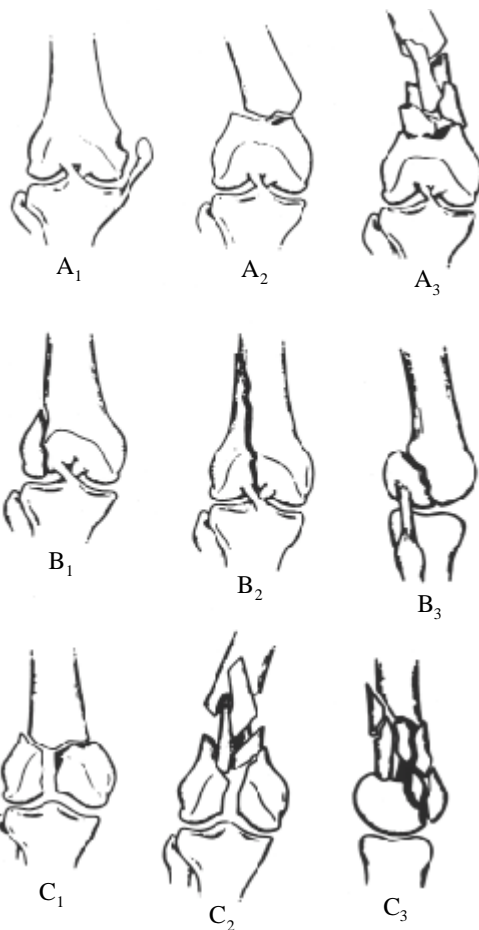


Fig 1. AO Classification of supracondylar fracture of femur.

10)(Fig 2) 1) 8)

10)(Fig 2) A2 2

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10) 1

1cm (Fig 3) awl

, C-arm X-ray 6-8

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2

110

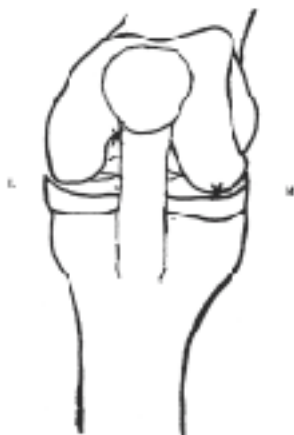


Fig 2. The two portals. The anterolateral portal is located just lateral to the patellar tendon and 1.5cm above the joint line; the anteromedial portal is located 2cm medial to the patellar tendon and just above the joint line.



Fig 3. The insertion site of the awl and reamer is located 1cm anterior to the origin of PCL

가

1

4

AO

A2 3

117

4

AO

A2 3

, AO

C2 1

가

, C2

1

90

5

가

, C2

A2

가

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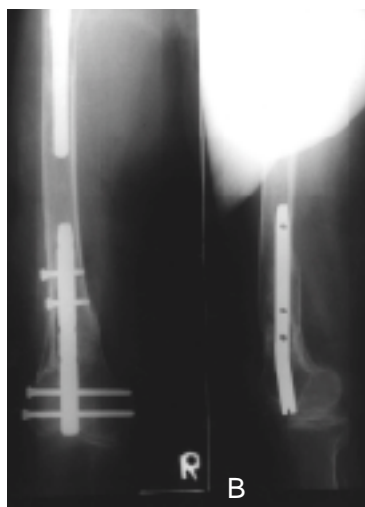


Fig 4-A. Sixty eight year old woman with supracondylar fracture of femur.
B. Union was obtained at postoperative 3months.



Fig 5-A. Thirty eight year old man with spiral fracture of distal femur.
B. Postoperative 4 months roentgenogram.



Fig 6-A. Fifty four year old man with comminuted supracondylar fracture of femur.
B. Postoperative 5 months roentgenogram showing anterior defect of the distal femur due to comminuted supracondylar fracture.

1.

O : 68

(Fig 4-A)

AO

A2

5

(Ottopelvis)

2.

O : 38

A2

1
(Fig 4-B)

3

AO

(Fig 5-A)

(Fig 5-B)

3.

, 4



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○ : 54
AO C2 (Fig 6-A), 1) 8)
2
가 , 308
156
가 , 5 8) 110 , C2
(Fig 6-B) 170
, A2 90 . C2
plate) (Blade 500ml, 1184ml⁸⁾,
(Dynamic compression 224ml
condylar screw) 8) 100ml
, , 6,9)
SE Lucas DS Seligson⁸⁾ SE. Lucas, DS.
1990 Seligson 8) ,
Green, Seligson, Henry 8,11) , 가
JJ McCarthy, Richard D, Parker 5) ,
Muller B 150, 200,
250mm 가 C-arm
10) 가
SE. Lucas, DS
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110
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