

## Angled Blade Plate

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angled blade plate

: 1991 10 2005 4 ,

Blade Plate 16 17 11

, 6 , angled blade plate

: 16 (17 ) 55.5

4

: angled blade plate

: , angled blade plate

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Mirel 가

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16).  
 ,  
 가  
 cephalo-medullary nail, sliding screw  
 and plate, blade plate  
 6),  
 15).

95 angled blade plate  
 130 angled blade plate

11  
 6  
 fibrous dysplasia 6 7 , giant cell  
 tumor 5 , metastatic bone tumor 2 , chon-  
 dromyxoid fibroma 1 , desmoplastic fibroma  
 1 , simple bone cyst 1  
 가  
 가

가 50%  
 . 95 angled  
 blade plate 15 10  
 , 5  
 130 angled blade plate 2  
 (Table 2).

1991 10 2005 4  
 blade plate 16 17  
 , 15 61  
 8 , 8 (Table 1).  
 가 11 12 ,  
 가 5 . 1

giant cell tumor 4 , metastatic bone tumor  
 2 . 95 angled blade plate  
 blade  
 , plate  
 (Fig. 1). 130

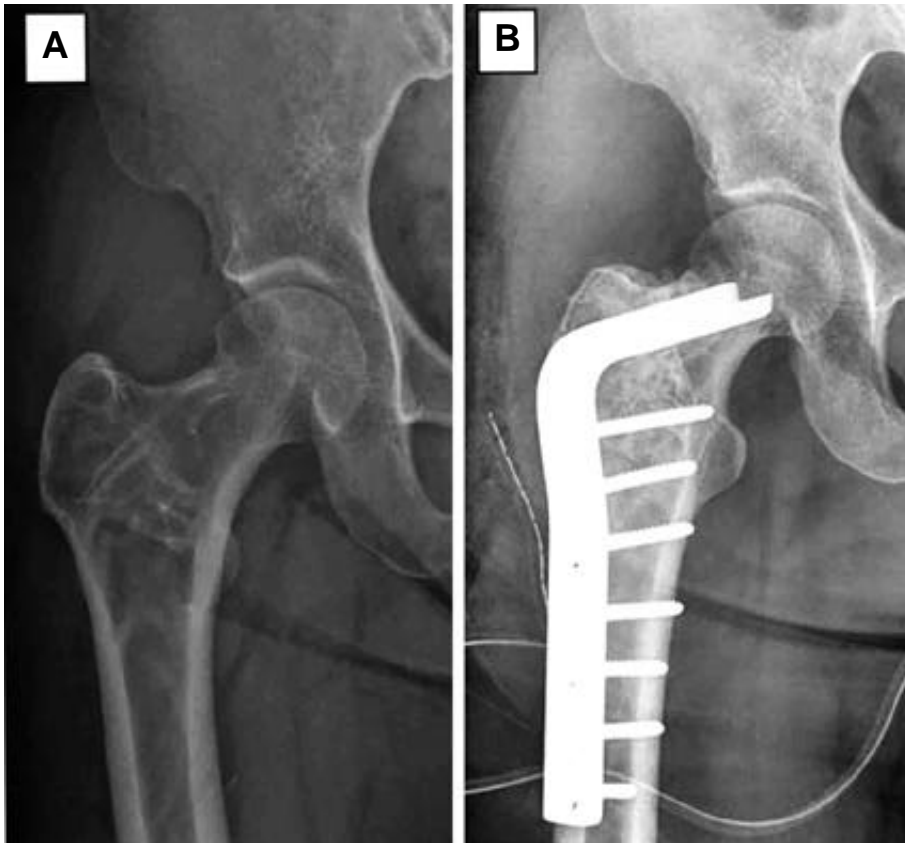
**Table 1.** Demography of patients data according to sex and age

Age (years)	Male	Female
10 20	2	2
21 30	2	2
31 40	1	1
41 50	0	2
51 60	3	0
61 70	0	1
total	8	8

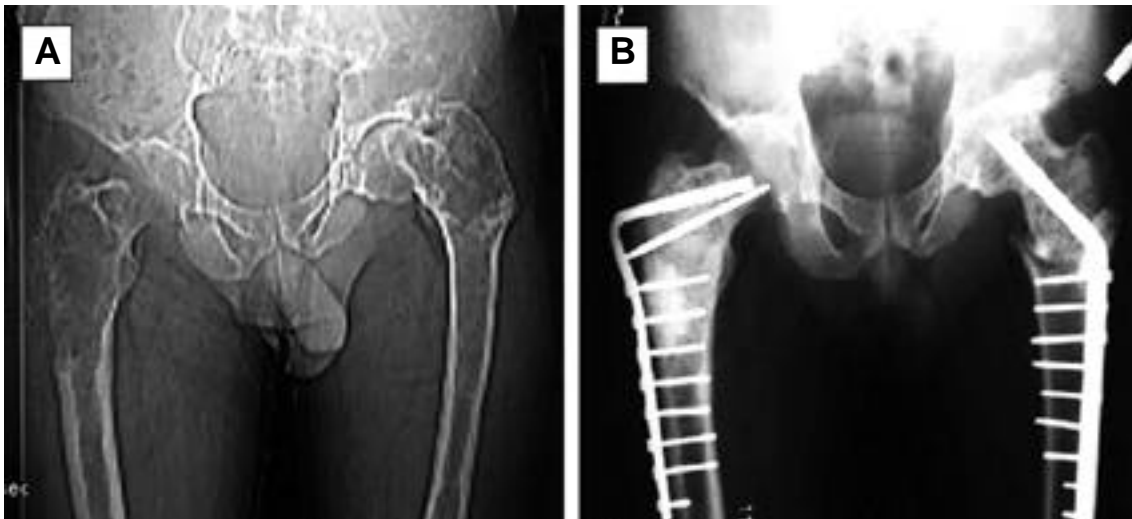
angled blade plate  
 plate  
 . Shepherd crook  
 (Fig. 2). 95 angled blade plate  
 (Fig. 3).

**Table 2.** Using instrument for the operation and location of tumor occurred in femur

	proximal intertrochanteric region	distal metaphyseal region
95 °angled blade plate	10	5
130 °angled blade plate	2	0



**Fig. 1.** (A) Preoperative AP roentgenogram showing simple bone cyst on the proximal intertrochanteric region of the femur. (B) Postoperative AP roentgenogram showing bone graft maintained with 95 degree angle blade plate.



**Fig. 2.** (A) Preoperative AP roentgenogram showing fibrous dysplasia on both proximal femur and Shepherd crook deformity on left proximal femur. (B) Postoperative AP roentgenogram showing 95 degree angled blade plate on right femur and 135 degree angled blade plate on left femur which supported the correction of deformity.

osteosarcoma tumor  
prosthesis , giant cell  
fibrous tumor 1  
dysplasia 6 7 , giant cell tumor 1 ,  
metastatic bone tumor 1 , chondromyxoid  
fibroma 1 , desmoplastic fibroma 1 , sim-  
ple bone cyst 1 ,  
giant cell tumor 4 , metastatic bone tumor  
1 (Table 3).

osteosarcoma tumor  
prosthesis , giant cell  
fibrous tumor 1  
tumor prosthesis  
angled blade plate  
(Fig. 4).  
1 95 angled  
blade plate ,

blade ,  
blade , plate  
4  
, fibrous dysplasia 1

fibrous dysplasia 3  
,  
fibrous dysplasia 1 13  
95 angled blade plate

130

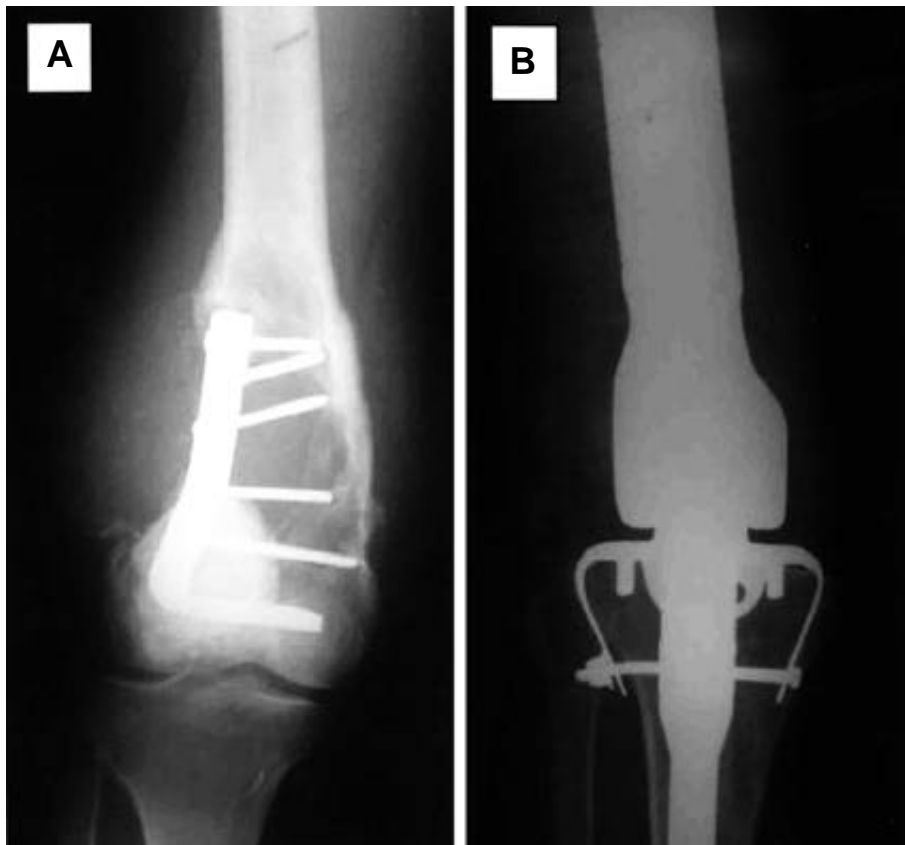
angled blade  
fibrous dysplasia 1



**Fig. 3.** (A) Preoperative AP roentgenogram showing giant cell tumor on distal femur. (B) Postoperative AP roentgenogram showing filled bone cement maintained with 95 degree angled blade plate.

**Table 3.** Final diagnosis of bone tumor

Diagnosis	Case
fibrous dysplasia	7
giant cell tumor	5
metastatic bone tumor	2
chondromyxoid fibroma	1
desmoplastic fibroma	1
simple bone cyst	1



**Fig. 4.** (A) At following radiograph, recurrence of giant cell tumor was observed, but pathologic fracture did not happen. (B) Postoperative radiograph showed that the lesion was replaced by tumor prosthesis.

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blade plate  
blade 7-10,13)  
blade 가  
blade plate가 95 angled blade plate  
plate 130 angled blade plate  
fibrous dysplasia 2  
angled blade plate 13  
angled blade plate  
130 angled blade plate  
가  
. bade  
. 130 Angled blade plate

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가 fibrous dysplasia  
shepherd crook 가  
1 가  
130 angled blade plate  
fibrous dysplasia 1  
130 angled blade plate  
shepherd crook  
, 95 angled blade plate  
compression hip screw  
blade  
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1 , angled  
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**Abstract**

**The Role of Angled Blade Plate in Treatment of Bone Tumor Occurred in Femur**

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**Purpose:** Bone tumor occurred in femur frequently involve proximal intertrochanteric region or distal metaphyseal region. Sometimes, the pathologic fracture can happen according to the size of tumor due to the substantial biomechanical stresses. Therefore, the prognosis can be improved biomechanically by the angled blade plate considering the anatomic configuration after the excision of tumor.

**Materials and Methods:** Between October 1991 and April 2005, there were a total of 16 patients(17 cases) who were treated by the excision of tumor and internal fixation with the angled blade plate for bone tumor occurred in femur. After the excision of tumor, we filled the cavity by bone graft in 11 cases and bone cement in 6 cases. The internal fixation was used by angled blade plate in all cases.

**Result:** The average follow-up time was 55.5 months(6-144 months) in 16 patients(17 cases). No metal failure occurred after the operation. Reoperation was performed in 4 cases due to tumor recurrence, and the internal fixation was firm until that.

**Conclusion:** The angled blade plate can prevent the fracture until grafted bone incorporated to host bone, and protect fragile connection between cement and host bone.

**Key Words:** Bone tumor, Angled blade plate

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