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&lt; &gt;

:

가

: 1994 3

1998 12

1

가 가

40

31

:

4

76

6

63

13

, 4

, 6

95%, 93.5%

2

(5%),

1

(6.5%)

3 가

,

1

가

가

1, 2

2,

1

:

가

4

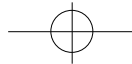
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\* 1999



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가 25 (80.6%) 가 ,  
 가 6 (19.4%) .  
 가 . ,  
 2.  
 ,  
 2 (5%), 13 (32.5%),  
 20 (50%), 5 (12.5%) ,  
 Henley<sup>7)</sup> I 5 (12.5%), II 12  
 (30%). III 18 (45%), IV 5 (12.5%) ,  
 24 (60%) 가 ,  
 1/3 12 (30%), 1/3 4 (10%)  
 .  
 1994 3 1998 12 , 4 (12.9%),  
 8 (25.8%), 14 (45.2%),  
 1 가가 71 5 (16.1%) , Henley  
 . 29.2 I 2 (6.5%), II 11 (35.5%). III 16  
 (13-53), 21.4 (13-55) , (51.6%), IV 2 (6.5%) ,  
 40 40 38.4 (17- 17 (54.8%) 가 , 1/3 6  
 72) . 31 31 (19.4%), 1/3 8 (25.8%) (Table 1).  
 36.1 (16-70) .  
 3.  
 1. , 39 (97.5%)  
 40 가 31 (77.5%) 가  
 가 9 (22.5%) , 31 가 10 , 13 , 4 ,

**Table 1.** Characteristics of the Fractures in reamed and unreamed group

	IM nailing	
	Reamed (N=40)	Unreamed (N=31)
Level		
Proximal 1/3	4	8
Middle 1/3	24	17
Distal 1/3	2	6
Pattern		
Segmental	2	4
Transverse	13	8
Oblique	20	14
Spiral	5	5
Comminution(by Henley)		
Grade I	5	2
Grade II	12	11
Grade III	18	16
Grade IV	5	2



8 , 가  
9 . , 22 (71%)  
가 4 , 8 , 1.  
5 , 5 , , 76 , 63  
가 12 . 13  
( $p > 0.05$ , Table 1).  
4.  
IC Nail  
(Osteo, Switzerland) , UTN (Synthes,  
Switzerland)  
10.7mm, 9.0mm 2.  
314mm, 312mm . 4 6  
, 4 29 (73%),  
18 (58.1%)  
5. , 6  
38 (95%), 29 (93.5%)  
(Table 2).  
, 6 8 3.  
, 2 (5%), 1  
(3.2%) 가  
6. , 1 (3.2%)  
가  
, , , , 가  
(Table 2).  
Student t-test chi-square test

**Table 2.** Results of the treatment in reamed and unreamed group.

	IM nailing	
	Reamed (N=40)	Unreamed (N=31)
Average operative time (mins.)	76	63
Union		
postop. 4 Mo.	29(73%)	18(58.1%)
postop. 6 Mo.	38(95%)	29(93.5%)
Delayed union	2	1
Non-union	0	1
Malunion	1	2
Superficial infection	2	0
Screw breakage	0	1

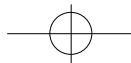


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## Abstract

## A Comparison of Reamed and Unreamed Interlocking Intramedullary Nailing for Closed Fractures of the Tibia Shaft

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**Purpose :** To get a reliable clinical data of interlocking IM nailing, the authors compared the results of the reamed interlocking IM nailing(Reamed) with unreamed interlocking IM nailing(Unreamed) in only closed fractures of tibial shaft.

**Material and Methods :** Each Reamed(n=40) and Unreamed group(n=31) was followed by twenty-nine(13-53) months and twenty-one(13-55) months. We analyzed the results and complications of the each group.

**Results :** The average total duration of the procedures performed without reaming was 13 minutes shorter than that of the procedures done with reaming( $p>0.05$ ). Twenty-nine fractures(73%) that were treated with reaming and eighteen(58.1%) that were treated without reaming united at postoperative 4 months. But, thirty-eight(95%) and twenty-nine(93.5%) fractures united at postoperative 6 months respectively. There was only one nonunion, which developed without reaming. Delayed union occurred after two nailing procedures with reaming and after one without reaming. Malunion occurred after one nailing with reaming and after two without reaming. There were two superficial infection, which developed after nailing with reaming.

**Conclusion :** There was no significant differences in the clinical and radiological result between reamed and unreamed nailing for the treatment of closed tibial shaft fracture. But, the bone union rate was significantly higher in reamed group than unreamed group at postoperative 4 months.

**Key words :** Tibia shaft, Closed, Reamed, Unreamed

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