

# Functional Out Come of Upper Tibial Fractures Treated With Uppertibial Locking and Non Locking Plates - A Retrospective Study from 2006 till 2017- Ten Year Follow Up

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## 1. Aim

Our aim was to study the functional outcome of locking and non locking plates treated for upper tibial fractures.

## 2. Materials and methods

All patients reported at ER and operated for upper tibial fractures from 2006 till 2017 were taken up for the study. Total numbers of cases were 278. Treated with nonlocking plates 132 and locking plates were 146. All patients were called and out of 278 cases reported were 202, of which nonlocking was 82 and locking was 120. all patients were asked to fill the proforma regarding functional outcome after surgery. Type of fracture line of treatment and PWB, TWB return to function were studied.

## 3. Results

Only patients treated for upper tibial fractures and reported to us were taken up for the study-202 patients. Schatzker classification was used of which type 1-38pts, type2-38, type3-41, type4-38, type5-24, type 6-13. of which non locking and locking were classified as per table, male female and side as table 2, grades of injury % as table 3, weight bearing PWB, TWB as table 4, rom as table 5, were analysed.

## 4. Conclusion

We found that locking plates done for 120. nonlocking was 82. With % of 59.40% locking and 40.6% for nonlocking of schatzker type1-23.76%, type2-18.81%, type3-

24.39%, type4-18.81%, type 5-11.8%, type 6-6.43%. in locking out of 120 patients 47% were male and female 53%, in nonlocking males were-45.1%, and female 54.9%.

## 5. Discussion

In our study we found that locking plates gave good results like early weight bearing early mobilization early wound healing less infection. Since it is a retrospective case further study to be done to evaluate our results.

Tabular Column and Clinical Pictures Attached

**Table 1**

Locking				Non Locking			
Male	%	Female	%	Male	%	Female	%
13	10.8%	12	10%	10	12.5%	13	15.8%
8	6.6%	11	9.16%	5	6.09%	14	17.0%
10	8.3%	20	16.6%	7	5.83%	11	13.4%
13	10.8%	10	8.3%	7	5.83%	8	9.7%
8	6.6%	6	5%	6	8.78%	4	4.8%
5	4.16%	3	2.5%	2	2.5%	3	3.65%

**Table 2**

S.No	Number of Patient	Non Locking	Locking
1	48	23	25
2	38	19	19
3	41	10	31
4	38	15	23
5	24	10	14
6	13	5	8
Total	02 (100%)	82 (40.5%)	120 (59.4%)

**Table 3**

S.No	Name	Grade 1		Grade 2		Grade 3		Grade 4		Grade 5		Grade 6	
		PWR	TWR	PWR	TWR	PWR	TWR	PWR	TWR	PWR	TWR	PWR	TWR
1	(A) Non Locking	3W	3M	3W	3M	6W	3M	6W	4 ½ M	6W	4 ½ M	6W	4 ½ M
	(B) ROM	0-90°		85°		86°		80°		80°		85°	
	(A) Locking	Post	6W	Day 1	6w	Day 1	6w	Day 1	6w	Day 1	6w	Day 1	6w
2	(B) ROM	120°		120°		110-120°		110°		116°		110°	