

**Teerthankar Mahaveer Medical College &  
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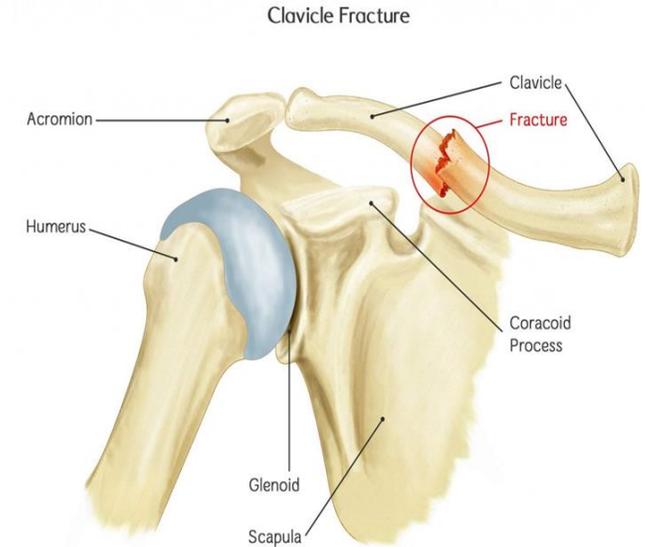


**COMPARISON OF THE FUNCTIONAL OUTCOME OF INTRAMEDULLARY  
NAILING VERSUS PLATING IN DISPLACED MIDCLAVICULAR FRACTURE:  
A PROSPECTIVE STUDY**

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## INTRODUCTION:-

- Clavicle fractures are generally managed conservatively eg. Figure of eight bandage.
- Imminent perforation of the skin, impending or existing neurovascular compromise and the floating shoulder represent absolute indications for operative treatment.
- Gross displacement of fracture fragments, as well as non-unions, are seen as relative indications for surgical fixation.
- Operative treatment of displaced mid shaft clavicle fractures can be achieved successfully using Recon/Lcp plates or intramedullary implants like TENS/Screw elastic nails.



## AIM:-

- Comparison of the Functional outcome of intramedullary nailing versus plating in displaced mid clavicular fractures.

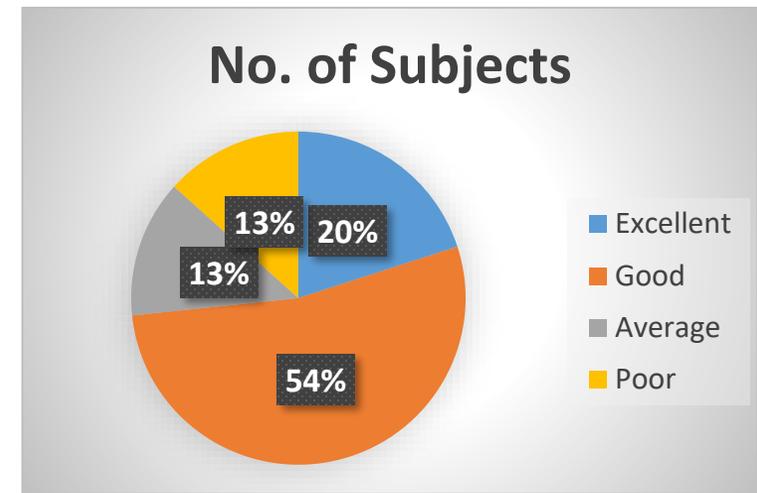
## **METHODS:-**

- We performed a Randomised Prospective study under orthopaedic department for fracture displaced mid clavicle who were managed with plating and nailing under inclusion criteria.
- **INCLUSION CRITERIA:-** (1) Age between 18-65 years and both gender, (2) Displaced midshaft clavicle fracture, (3) Trauma < 3 weeks.
- **EXCLUSION CRITERIA:-** (1) Age <18 years and >65 years, (2) Fracture involving medial & lateral third, (3) Severely comminuted fractures, (4) Undisplaced fracture, (5) Open fractures, (6) > 3 weeks old fracture, (7) Pathological fracture.
- Outcome was measured by DASH score and complications during followed up at 6<sup>th</sup> week, 3<sup>rd</sup> month and 6<sup>th</sup> month after surgery.

## **RESULT:-**

- A total 15 patients were included in this study. There were 8 and 7 patients in plating group and nailing group respectively.

- There was no significant difference found between two groups with regard of functional outcome after fracture union.
- Although lesser operative time, lower blood loss, less duration of hospital stay, easier implant removal, and better cosmetic appearance were noted in the nailing group.
- Infection and post operative scar were more in plating group and impingement, malunion rate more in nailing group.



DASH score scale

DASH SCORE	OUTCOME	NO. OF NAILING PT (n= 7)	NO. OF PLATING PT (n= 8)
<10	Excellent	1	2
11-20	Good	4	4
21-30	Average	1	1
>30	Poor	1	1



Fracture managed with Plating

functional outcome at 6 month follow up

COMPLICATION	NO. OF NAILING PT	NO. OF PLATING PT
Infection	0	1
Impingement	4	2
Implant failure	0	0
Hypertrophic scar	1	2
Delayed union	0	0
Mal union	1	0
Non union	0	0



Fracture managed with Nailing

## CONCLUSION:-

- Functional outcome remain same in intramedullary nailing and plating group. However, intramedullary nailing is advantageous concerning faster healing, secure implant removal, and better cosmetically appeared scars.

## ACKNOWLEDGMENTS:-

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