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CLINICO-RADIOLOGICAL OUTCOME OF FRACTURES OF DISTAL END RADIUS : A PROSPECTIVE STUDY

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INTRODUCTION

- Distal radius fractures are one of the most common types of fractures in the pediatrics and elderly populations.
- Most distal radius fractures can be treated by close reduction and plaster immobilization, which often leads to satisfactory outcomes except redisplacement of the fracture, wrist ankylosis and limited activity.

- So to overcome these above complications , now a trend is shifted towards open reduction and Internal fixation for fracture management.

AIM

- To assess clinico-radiologically outcome of distal end of radius fractures that managed (conservative and surgical) in our institution between January 2019 to December 2019.

MATERIAL AND METHODS

- We performed the study under orthopaedics department using clinically and radiograph of distal end of radius fractures on 20 patients who were managed (conservative and surgical both) under inclusion criteria.

Inclusion criteria :

- Patients of age 18 years and above with unilateral fractures of distal end of Radius.
- No previous history of distal end of Radius fracture or distal end of Radius operation.
- All displaced fractures of distal end of radius.

Exclusion criteria :

- Bilateral fractures of distal end of Radius.
- Non osteoporotic pathological fracture.
- Fractures involving shafts of both Bones of forearm.
- Previous History of Fracture of Distal end of Radius on either side.
- Pregnancy.

- Fracture classified by using frykman classification.
- Lidstrom and Mayo Score used to assess the patient radiologically and clinically on the day of intervention (day 0) pre and post reduction and subsequent followed up on day 7-10th , 6th week , 3rd month , and 6th month.

RESULTS

VARIABLES	conservative	surgical
Male	5/10(50%)	7/10(70%)
Female	5/10(50%)	3/10(30%)
Left	6/10(60%)	7/10(70%)
Right	4/10(40%)	3/10(30%)

<u>Final outcome LIDSTROM SCORE</u> (6 th months)	Surgical (n=10)	Conservative (n=10)	P-value (p<0.05)
Excellent	6	1	0.0383
Good	2	1	
Fair	1	7	
Poor	1	1	

<u>Final outcome MAYO SCORE</u> (6 th months)	Surgical (n=10)	Conservative (n=10)	P-value (p<0.05)
Excellent	7	1	0.0383
Good	1	2	
Fair	1	6	
Poor	1	1	

- There were significant difference between conservative and surgical intervention as $p\text{-value} < 0.05$. Consequently, Surgical intervention is better than conservative intervention.

CONCLUSION

- Surgical intervention for fracture distal end radius reduces chances of wrist joint stiffness and loss of reduction and good results can be obtained as compare to conservative intervention.
- So, in our opinion surgical intervention for treatment of fracture distal end radius is a good method with an excellent outcomes.

ACKNOWLEDGEMENT

- I sincerely express my deep gratitude towards my guide Prof. Man Mohan Sharma and Prof. Najmul Huda (HOD) department of Orthopaedics for their invaluable guidance and supervision.
- I am also thankful to all patients for their cooperation without them this study would not have been possible.