Complications After Distal Radius Fracture Treatment

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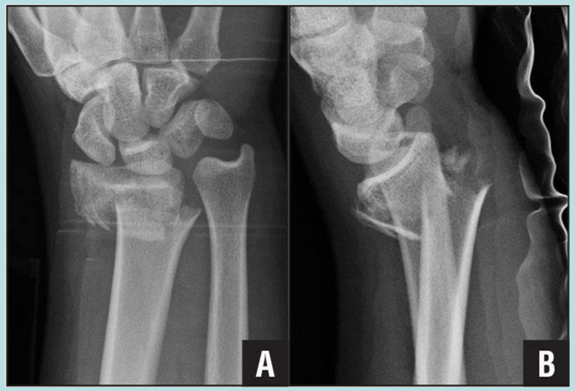
BACKGROUND

- Distal radius fractures are one of the commonest upper extremity trauma presentations. However, controversies exist as to the classification, management and outcome measures.
- We aimed to review the presentation and management of distal radius fractures at a busy university hand surgery practice over 5 years with a view to describing the presentation, management and outcomes after treatment.

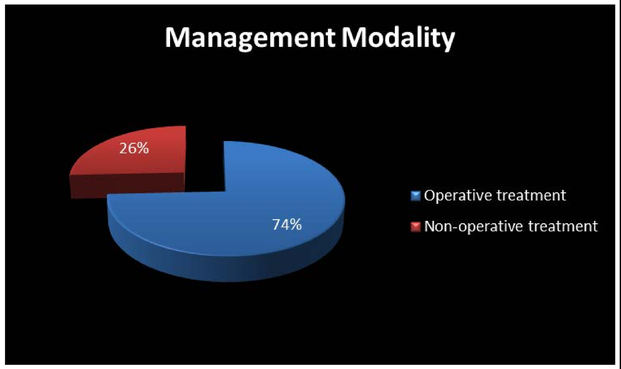


METHODS

- All consecutively –seen patients in clinic or emergency room by a university-hospital hand service between 2010 and 2015 were included in the study.
- Preoperative radiographs were analyzed and the patients were managed by surgeon preference and evaluated postoperatively using pain scores and Disabilities of Arm, Shoulder and Hand scores.
- The operative and non-operative management groups were compared based on clinical outcomes.

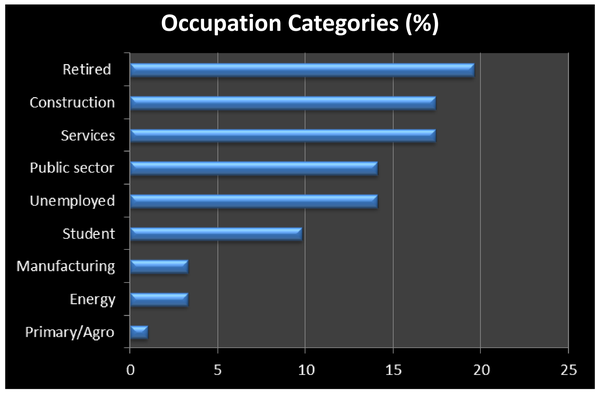
Table showing demographics and fracture characteristics

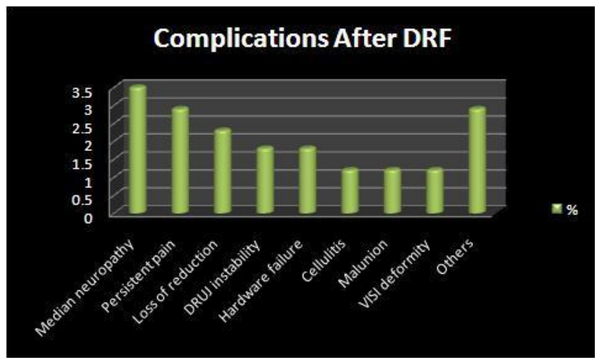
	Non-Operative [Mean (SD)/cases(%)]	Operative [Mean (SD)/cases(%)]
Age (yrs)	45.2 (21)	45.9 (17.6)
BMI (kg/m2)	27.9 (8.1)	27.5 (6)
Duration of follow-up (mth)	3.6 (5.6)	5.3 (5.4)
Fracture characteristics		
Radial height (mm)	8.8 (2.5)	6.7 (3.9)
Radial inclination (deg)	19.3 (6.4)	14.4 (8.2)
Volar tilt (deg)	13.4 (7.8)	19.7 (13.6)
Extra-articular	16	14
Any complication	5 (11.4)	28 (22)
Postoperative pain score of (10)	4.4 (1)	4.9 (1.8)



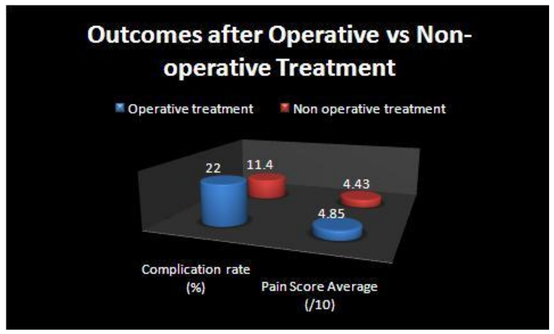
RESULTS

- A total of 171 distal radius fractures in 169 patients were treated over the 5-year period of the study.
- 44 (25.7)% of the patients were managed non-operatively with casting, and 127 (74.3%) operatively with percutaneous pinning or open reduction and plating.
- Mean follow-up was 4.9 months.
- The most common complication was median neuropathy (6 patients), followed by persistent pain and loss of reduction.
- There was no significant difference in complication rates (p=0. 18) or pain scores (p=0.56) between the operative and non-operative management groups.





RESULTS



CONCLUSIONS

- After adjustment for fracture severity, operative and non-operative management of distal radius fractures resulted in similar clinical outcomes.

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