

Clinico-Radiological Outcome after Surgical Interventions in Bimalleolar Ankle Fracture



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INTRODUCTION

- Fractures and sprains around the talocrural joint are one of many common injuries. Improper treatment and inadequate reduction of these fracture can lead to significant disability in the form of pain, instability and early onset of arthritic changes.¹
- An ankle is considered unstable when the loss of normal constraints around the ankle permits the talus to move in a non-physiologic pattern.
- Under such circumstances, the dynamic joint surface contact area within the ankle is diminished, which predisposes to articular cartilage damage and premature degeneration.^{2,3}
- Treatment of ankle fractures has come a long way from conservative treatment to an era of open reduction and internal fixation as a result of contributions of Lauge Hansen, Danis and Weber & many others.⁴

AIM

To assess various methods of internal fixation in bimalleolar fracture & to evaluate their clinical and radiological outcome postoperatively.

METHODS

Patients of Bimalleolar ankle fractures who have been operated in 2017-18 and that have been operated, were selected.

Inclusion Criteria Includes Bimalleolar ankle fracture between the age of 18 to 60 years including both gender and closed fracture.

Exclusion Criteria includes Pathological fracture, Isolated Medial or Lateral malleolus fracture, associated injury to ipsilateral limb, patients previously operated over Ipsilateral affected Limb, neuromuscular disorders.

Fracture type were classified as per **Lauge-Hansen classification** using Anterior-Posterior & Lateral view radiographs of affected lower limb.

Old cases were followed once & All new cases were followed up at 1st, 2nd, 3rd and 6th month after surgery

Baird & Jackson Scoring system⁵ was used for assessing clinical and radiographic outcome of operated cases.

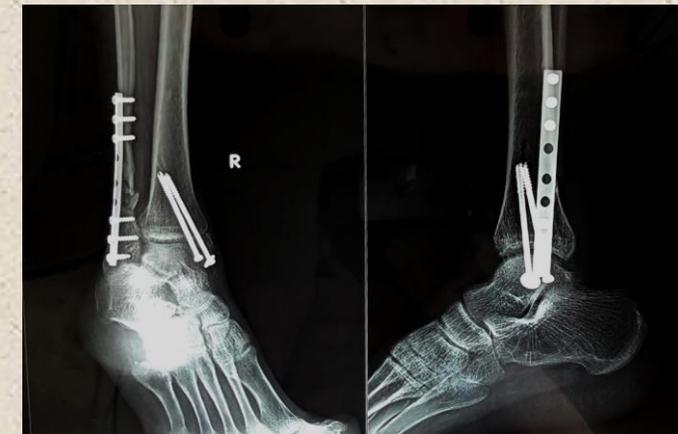
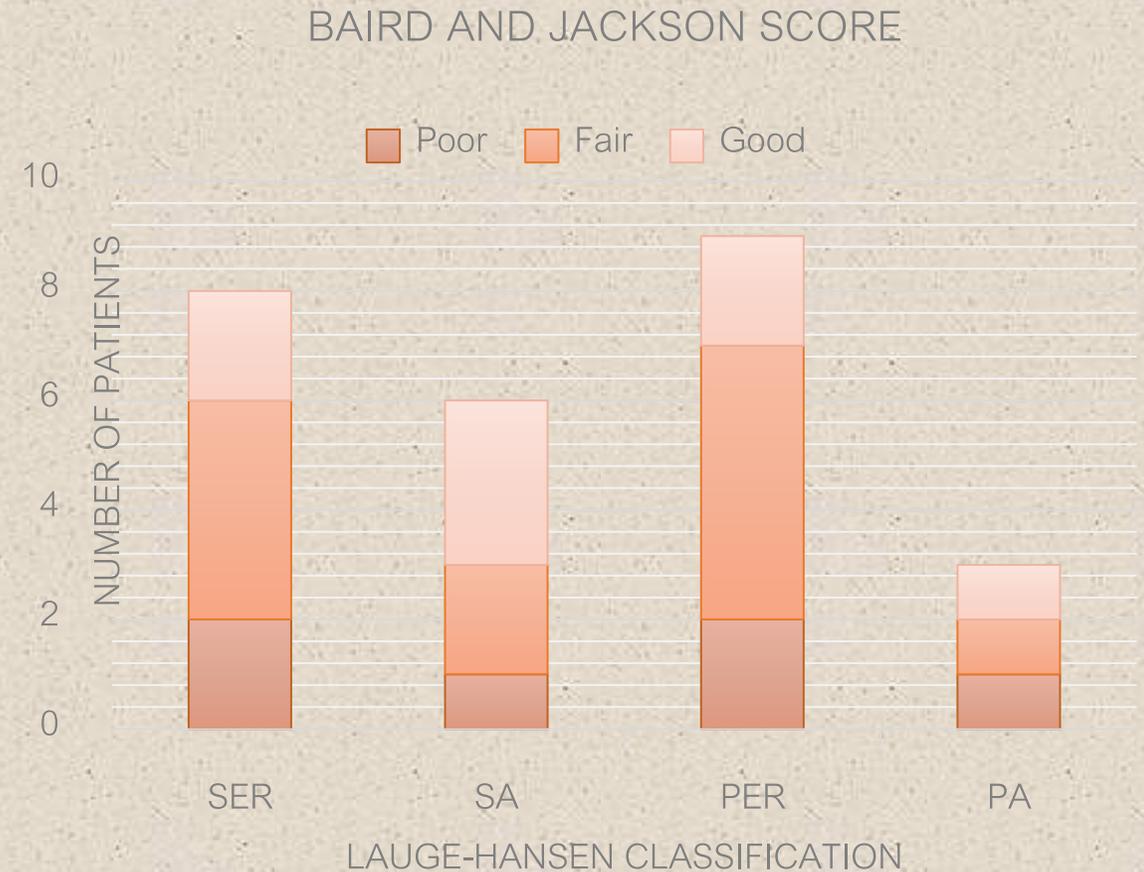


Fig. - Preoperative and post operative radiograph

RESULTS

- This study included 27 patients within the mean age group of 34 years.
- Majority of the patients sustained injury as a result of Road Traffic Accident.
- Complications such as Joint stiffness was found in 6 patients, post-operative infection in 4 patients, delayed union in 4 patients & implant breakage in 1 patient.



CONCLUSION

- Based on this study, cases of Pronation-External rotation injury were common as compared to Supination-External Rotation injury.
- We saw that malleolar fixation by plates and screws yielded better functional result as compared to k-wiring and tension band wiring.
- Good functional outcome was seen as desirable anatomical reduction and articular congruity was achieved.

ACKNOWLEDGEMENTS

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