INTRODUCTION:
Humeral Shaft fractures account for approximately 1-3% of all fractures\(^1\). Management of this fractures are mostly non-operatively with functional bracing, however surgical indications include pathological fractures, open fractures, polytrauma patients, vascular injuries and floating elbows. The aim of our study is to compare the outcome after operative and non operative treatment of humeral shaft fractures. We looked into time to radiological union and complications.

METHODS:
We undertook retrospective review of all cases of humeral shaft fractures managed at our center from January 2013 to December 2017. Electronic records of patient demographic, union rate and complications were reviewed. Only patients aged 16 and over were included in this retrospective review. Periprosthetic and pathological fractures were excluded.

RESULTS:
A total of 55 patient were included in this study. 44 patients underwent internal fixation, 3 patients were treated with external fixations and 8 patient were treated non operatively. Average age of patients is 33 years old. Male patients accounted for 72% of total patients. The average time for union in operatively treated patient were 12 weeks compared to patients treat non-operatively were 15 weeks. In operatively treated patients 22% were complicated with non-union. Patients who were treated with bracing had malunion with the average degree of angulation of 16 degrees in coronal view and 17 degrees in sagittal view.

DISCUSSION:
Non-operative treatment used to be the preferred choice of treatment in humeral shaft fractures\(^2\). However in recent studies that have been carried out similar to ours, it has been proved that internal fixation have a faster union rate.

CONCLUSION:
The data indicates that plate fixation achieved higher and faster union rates. Nonetheless fractures managed with functional bracing were also successfully managed at our center. A prospective randomized clinical trial is needed in order to examine other aspects of outcome such as shoulder and elbow function, patient satisfaction and trauma related quality of life.

REFERENCES: