A Step Forward: Outcome Of Displaced Clavicle Fracture Treated With Pre-Contoured Anatomical Locking Plate

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INTRODUCTION:

Clavicle fractures are common injuries in young, active individuals and accounts for 2.6% of all fractures. For more than five decades, conservative treatment remains as main choice for clavicle fractures[1].In our study, we have treated displaced clavicle fractures with open reduction and internal fixation using precontoured anatomical locking clavicle plate.

METHODS:

The study was conducted over a year with patients admitted in ward diagnosed as displaced midshaft clavicle fractures, treated with precontoured anatomical locking plate. All patients were followed up for clinico-radiological progression of fracture union and functional outcome assessment using DASH SCORE devised by Hudak *et al* at 6 weeks,3 months and 6 months.

RESULTS:

All patients showed excellent results average time for radiological union was 6.5 weeks. In terms of functional outcome, mean final DASH score at 12 weeks are 5.5 exceptionally.All patients had full range of motion at final follow up without any limitation.

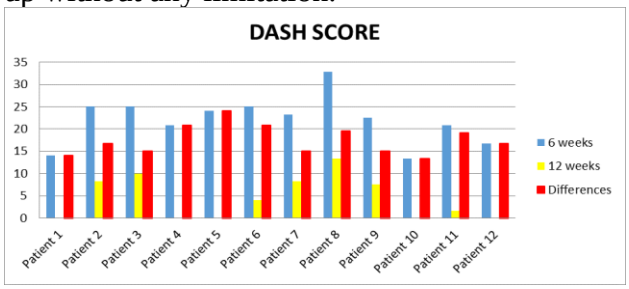

Figure 1: DASH scores at 6 and 12 weeks

Figure 2: Pre operative and post operative 12 weeks

DISCUSSIONS:

Main problems with conservative treatment are nonunion, poor functional outcome, prolonged recovery time. The aim for surgical intervention is to improve the functional outcome, avoid non unions and symptomatic malunion by achieving close to anatomic reduction.

Surveys have shown unsatisfactory patient orientated functional outcomes 31% for the conservative treatment of displaced mid-shaft clavicle fractures and nonunion rates between 15 – 20% [2].

Our results correlates well with study that shows early primary plate fixation of completely displaced midshaft clavicular fractures results in improved patient-oriented outcomes, improved surgeon-oriented outcomes, earlier return to function, and decreased rates of non union and malunion[3].

CONCLUSION:

The study concluded that precontoured anatomical locking clavicle plate for treatment of substantially displaced clavicle fracture provides better functional outcome and faster recovery comparatively with higher satisfaction rate among patient. We serve this study as a step forward in clavicle fracture management.

REFERENCES:

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