



MANAGEMENT OF FRACTURE DISTAL RADIUS WITH UNIPLANER EXTERNAL FIXATOR.

Orthopaedic

dr siddharth
Sharma

Dr S.K. goyal

Dr vijay kumar
meena

ABSTRACT

BACKGROUND- the fracture of distal radius is one of the most common skeletal injury treated by an orthopaedic surgeon and these injuries usually occur Due to fall on out stretched hand. There are various methods for treating these fractures varying from closed reduction and plaster application, percutaneous k-wire fixation, uniplaner fixator, plate fixation or combination of these. In this study, we treated these fractures by application of uniplaner external fixator.

MATERIAL AND METHOD- total 32 patients were treated in dept of orthopedics, JLN medical college, Ajmer during may 2006 to October 2007. Age group from 21 to 70 yrs. 20 patients were male and 12 patients were female and most common cause of injury is fall on outstretched hand. All the patients reported in emergency room with pain and swelling over wrist and painful wrist movement. the xray done in both AP, lateral view of wrist and initially a plaster slab is applied and analgesics given. All patients admitted and properly evaluated for operation. All the patients were treated by the application of uniplaner external fixator and results evaluated by means of regaining of wrist movement, persistent of pain, any residual deformity at wrist. The 8 patients had excellent results, 18 patients had good results and 6 patients had poor results.

COMPLICATIONS- the complications included pin tract infection in 2 pt, pin loosening in 5 pt, sudecks dystrophy in 1 pt and residual pain at DURJ in 12 pt

CONCLUSION- the application of uniplaner fixator is a very good option for treatment of fracture distal end radius. It provides excellent reduction; early mobilization of pt and chances of loss of reduction is very less.

KEYWORDS:

INTRODUCTION

the fracture of distal radius are one of the most common skeletal injury treated by an orthopedic surgeon and these injuries usually occur due to fall on out stretched hand and more common in elderly pt. most of these fractures are comminuted and have intraarticular extension. The close reduction and plaster technique usually do not give satisfactory result in these types of fractures. Here in this study, we treated all these fractures by closed reduction under general anesthesia and application of uniplaner external fixator. This method gives excellent reduction, early mobilization of pt and fewer complications in term of residual pain, restriction of wrist movement and persistent deformity at wrist

MATERIAL AND METHOD

Total 32 patients were treated in dept of orthopedics, JLN medical college, Ajmer during May 2006 to October 2007. Age group from 21 to 70 yrs. 20 patients were male and 12 patients were female and most common cause of injury is fall on outstretched hand. All the patients reported in emergency room with pain and swelling over wrist and painful wrist movement. The x-ray done in both AP, lateral view of wrist and initially a plaster slab is applied and analgesics given. All patients admitted and properly evaluated for operation. All pt operated under regional anesthesia or general anesthesia. In supine position with a hand rest on standard fracture table and under c-arm control. First, closed reduction done and checked under c-arm in both AP and lateral view. Then two- 3.5 mm schanzs pin inserted in shaft of radius. 6 to 8cm proximal to fracture site and then two 2.5 mm schanzs pin inserted in the proximal part of second and third metacarpals bone. Then, these pins are attached to a uniplaner external fixator and tightened. The desired distraction done and reduction again checked under c-arm control and pin tract dressing done. A check X-ray is done in the evening of operation day and patient is discharged next morning from the hospital and advised to follow up at 2 weeks, 4 weeks, 6 weeks for 6 months to 1 year. The

fixator is removed at 6-8 weeks after fracture union shown radiologically and wrist mobilization exercised advised.

COMPLICATION- the complications included pin tract infection in 2 pt which heal up by daily dressing, pin loosening in 5 pt which need removal of pin and plaster application at 3 weeks and sudecks dystrophy in 1 pt which need prolong physiotherapy and residual pain at DURJ in 12 pt

RESULTS- the overall result of the study was good. . 8 patients had excellent results, 18 patients had good results and 6 patients had poor results. The result accessed on the basis of regaining of wrist function, persistent pain at DURJ or any residual wrist deformity

CONCLUSION- the application of uniplaner fixator is a very good option for treatment of fracture distal end radius. Especially in patients with comminuted fracture and intraarticular involvement of wrist. It provides excellent reduction; early mobilization of pt and chances of loss of reduction is very less.



PRE OPERATIVE XRAY OF PATIENT



POST OPERATIVE XRAY OF PATIENT



**POST OPERATIVE XRAY OF PATIENT AFTER FIXATOR
REMOVAL SHOWS SOLID BONY UNION**



**CLINICAL PHOTOGRAPH OF PATIENT SHOWING FULL
FUNCTION OF WRIST AFTER REMOVAL OF FIXATOR**