ABSTRACT

BACKGROUND AND OBJECTIVES

Displaced talar fractures remain a therapeutic challenge for orthopaedic surgeons. According to the literature, these fractures are often associated with a high complication rate, including malunion, osteonecrosis or osteoarthritis.

The operative treatment of such fractures seems to require a balance between an aggressive treatment with a strictly anatomical reduction and essential respect of soft tissues to limit skin complications or osteonecrosis.

Fractures of the talus are known to be relatively uncommon. Talus fractures comprise approximately 0.1 to 0.85 percent of all fractures. Most occur as a result of high-energy trauma, such as motor vehicle accidents. As a result, talus fractures are often accompanied by other injuries, including dislocation of adjacent joints and fracture of neighboring bones. However, due to the relatively better diagnostic methods introduced, more talar fractures have been recognized and it remains the second most common tarsal bone to get fractured after calcaneum.

METHODS

15 patients were selected in an age group of 15-60 years who suffered from closed talus fractures by either road traffic accidents or fall injuries.

After clerical evaluation and investigations, X-ray and CT scan of ankle of patients were done. The patients underwent operative fixation of talus fracture by cancellous screw fixation and post operative immobilization were given.

Following discharge, patients were followed up at 3rd month, 6th month and 1 year and during each follow up serial x-rays were taken anteroposterior,
lateral and mortise view of ankle joint. Clinical assessment of the ankle was
done using Baird Jackson score, Olereud Mollander and AOFAS scoring.

RESULTS

5 of the 15 cases had signs of avascular necrosis in follow up xrays taken
and there was clinical complaints of pain and inability to walk and undergo
daily activities along with gait abnormalities. 4 out of these 5 cases had joint
incongruity and ankle joint pain and restriction of movement signifying arthritic
changes. One case had non union seen at 3rd month post op xray and was
advised and put on Below knee cast and immobilization for 8 weeks. In all cases
cancellous screws were used as implant of choice and no implant related
complications were found in any of the patients. There was no post operative
skin infection or skin necrosis seen in any patients.

CONCLUSION

Open reduction and internal fixation is recommended for the treatment of
displaced talar neck and/or body fractures. A delay in surgical fixation does not
appear to affect the outcome, union, or prevalence of osteonecrosis, rather the
type of fractures which might be indirectly influenced by the mechanism of
injury provides a statistical significance.

KEYWORDS

Talus, talus neck fracture, cancellous screw, Baird Jackson score, Olereud
Mollander score, AOFAS score, osteonecrosis