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Limited Open Reduction and Percutaneous Screw Fixation of Displaced Intra-Articular Fracture of Calcaneus: Review of 48 Fractures

Tariq El khalifa, MS (Ortho), FRCS Ed* Mohammed El Bagali, CABS** Waseem Yousif, MBBS*** Feras Hashem, MD****

Objective: To evaluate the result of treating displaced intra-articular fracture of calcaneus using minimal open reduction and percutaneous screw fixation.

Setting: Orthopedic Department, Salmaniya Medical Complex (SMC).

Design: Retrospective study.

Method: A review of 50 patients who had percutaneous screw fixation for displaced intraarticular fracture of calcaneus was done. Soeur and Remy modification of Essex Lopresti for the assessment of the degree of comminution was used. Forty-four patients were evaluated for an average 2.5 years (1 to 4 year) after surgery. The outcome was assessed using the functional hind foot score described by Paley et al and their radiological criteria.

Result: Satisfactory results were obtained in 79% of displaced intra-articular fracture of calcaneus, grade mild to moderate comminution. Only two patients with superficial infection were encountered.

Conclusion: In this study, operable cases of displaced intra-articular fracture of calcaneus, mild to moderate comminution were treated adequately and effectively using percutaneous screw fixation. Percutaneous screw fixation of the displaced intra-articular fracture of the calcaneus is an effective, safe, and reproducible method of treatment.

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