

International Surgery and Ortho Conference

October 25-26, 2017 | Toronto, Canada

The use of the external fixator as an alternative to avoid the complications of the surgical treatment of articular fractures of the calcaneus

Marina Rosa Filezio, Priscilla Goes Medea de Mendonça, Stefan Wolfgang Carotta Muller, Alvaro Diego Pupa de Freitas, Danilo Lira Gianuzzi and Paolo Buffone
Faculdade de Medicina do ABC, Brazil

Objective: The objective of this study was to analyze the complication rates of the surgical treatment of these fractures with the use of the lateral external fixator associated with the percutaneous approach. The secondary objective is the evaluation of the clinical, functional and radiographic results of these patients.

Methods: A single-center, retrospective case study of 15 patients (17 feet) with intra-articular calcaneus fracture treated with lateral external fixator between March 2015 and July 2016. 14 were male, aged between 27 and 58 years (average of 42.5 years). According to the Sanders Classification, 1 patient was IIA, 2 IIIAB, 5 IIIAC, 4 IIIBC, and 5 cases as IV. The complication rate, the values of the Böhler and Gissane angles and the AAOFAS questionnaire were evaluated in the pre-and postoperative period.

Results: The 15 patients (17 feet) were followed between 6-12 months (average of 9 months). None of the patients evaluated showed infection, dehiscence or skin necrosis during follow-up. The Böhler angle had a preoperative angle ($14.5\pm 4.5^\circ$) increase to ($21\pm 9^\circ$) postoperative. The Gissane angle had a decrease from ($135\pm 15^\circ$) in the preoperative period to ($122.5\pm 12.5^\circ$) in the postoperative period. The AAOFAS questionnaire showed an improvement in the score from (55.5 ± 9.5) in the preoperative period to (86 ± 14) in the postoperative period.

Conclusion: The use of lateral external fixator as definitive treatment of intra-articular calcaneus fractures has been shown to be safe and reliable. There was no complication rate and the clinical and radiographic results were satisfactory.

e: ma.rosa00@gmail.com