

Abstract Number: 18198

Treatment of distal tibiofibular syndesmosis injury in ankle fractures with suture button

Guilherme Honda Saito¹, Marcelo Pires Prado¹, Alberto Abussamra Moreira Mendes¹, Danilo Ryuko Nishikawa², Beatriz Devito¹, Leticia Devito¹

1. Hospital Israelita Albert Einstein, São Paulo, SP, Brazil.

2. Hospital do Servidor Público Municipal de São Paulo, São Paulo, SP, Brazil.

ABSTRACT

Introduction: Distal tibiofibular syndesmosis (DTFS) injuries in ankle fractures are conventionally treated by DTFS fixation with stabilizing screws. However, screws may cause problems due to their inherent rigidity. Therefore, the popularity of fixation devices that allow DTFS mobility has increased. The objective of the present study is to describe the outcomes of the surgical treatment of ankle fractures with DTFS injury using suture button syndesmosis fixation.

Methods: Forty-four patients surgically treated with a suture button for ankle fractures associated with DTFS injury were retrospectively analyzed. The mean follow-up time was 14.7 months. Patient functioning was assessed using the American Orthopedic Foot and Ankle Society (AOFAS) score, the visual analog scale (VAS), the rate of complications and the need for reoperation.

Results: The mean AOFAS score at the last follow-up visit was 92 (35-100). The mean VAS was 0.8 (0-7). Eight patients (18%) developed complications, the most common of which were posttraumatic osteoarthritis and peroneal tendinopathy. Reoperations were performed in 6 patients (13.5%) and included orthopedic hardware removal, peroneal tenoplasty, neurolysis or distal tibiofibular arthrodesis. Only one patient was unable to resume previous activities.

Conclusion: Suture button is a reliable alternative for DTFS fixation in ankle fractures, providing excellent functional outcomes with a low rate of complications. This device has the theoretical advantage of allowing physiological mobility of the distal tibiofibular joint and generally requires no subsequent orthopedic hardware removal.

Keywords: Distal tibiofibular joint; Ankle trauma; Ligaments.

