Comparison between extracorporeal shockwave therapy, placebo ESWT and endoscopic plantar fasciotomy for the treatment of chronic plantar heel pain in the athlete.

Abstract:
Plantar fasciitis can be a chronic and debilitating condition affecting athletes of all levels. The aim of this study is to compare treatment outcomes for the treatment of chronic plantar fasciitis in athletes, comparing focused extra corporeal sound wave therapy (ESWT) and the surgical endoscopic plantar fasciotomy (EPF). A total of 37 eligible patients were enrolled in the study between May 2006 and December 2008 at a single institution. Patients were either enrolled in the surgical group, or to the ESWT group which included a placebo controlled, randomized group (P-ESWT). Pre and post Visual Analog Scores (VAS) and Roles and Maudsley (RM) scores were recorded and compared between the three groups. The patient's return to activity (RTA) was also documented. The results showed statistical improvement within the EPF and ESWT groups with both VAS & RM scores, with EPF being significantly better than both ESWT and P-ESWT in terms of treatment outcomes. Patients enrolled in the ESWT were able though to continue with their exercise regimen, while the EPF group was able to return to their athletic activity in an average of 2.8 months. In conclusion, EPF and ESWT are both effective forms of treatment for chronic plantar fasciitis; EPF being superior in outcomes yet ESWT treatment could be preferable since the athlete can remain active during treatment.