

Clinical Study of Bone Decompression Technique for Calcaneodynia

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Summary:

Bone decompression technique is a very effective treatment for the management of calcaneodynia.

Abstract:

The goal of this work was to evaluate the long-term efficacy of bone decompression for calcaneodynia. Bone decompression technique was practiced by using hand-held T-shape instrument, it's drilling tip is 2mm in diameter, and penetrate in to the calcaneus in 2cm. For the control group, the width of Zhendao instrument's blade for the practice of acupotomy is 0.8mm which not cut into calcaneus. Between February 2012 and February 2013, 60 evaluable patients were recruited for this prospective trial. 30 patients received bone decompression therapy. 30 patients received acupotomy. The therapy consisted of 6 time/2 months. In case of insufficient remission of pain after 2 months a second series was performed. Patients were randomly assigned to receive either bone decompression or acupotomy. Endpoint was pain reduction. Pain was measured before, 2 weeks (early response), 2 months (delayed response) and approximately 2 years after therapy (long-term response) with a questionnaire-based visual analogue scale (VAS) and a comprehensive pain score (CPS). The median follow-up was 15 months (range 6-28 months). The overall early, delayed and long-term response rates for all patients were 93, 90 and 87%. The mean VAS values before treatment, for early, delayed and long-term response for the bone decompression and acupotomy groups were 68.3±24.1 and 66.0±22.5 ($p>0.05$), 44.8±23.2 and 38.2±24.3 ($p>0.05$), 16.1±21.8 and 36.9±20.8 ($p<0.05$), and 8.3±15.2 and 28.9±16.7 ($p<0.05$). There're significant differences in long-term response quality between the two arms were found ($p<0.05$). Bone decompression technique is a very effective treatment for the management of benign calcaneodynia.