ABSTRACT

BACKGROUND: Painful heel syndrome is a common condition affecting adult population. It causes considerable discomfort to the patient. In the present study, we have treated painful heel syndrome by phonophoresis using local steroid ointment and contrast bath. MATERIALS AND METHODS: Thirty three patients were recruited for the study. All the patients were evaluated clinically according to Visual analogue scale for pain. RESULTS: 27 patients had excellent outcome with cessation of symptoms. VAS scores improved from an average 4 – 6 to Zero. CONCLUSION: The treatment consisting of phonophoresis using steroid ointment along with contrast bath and orthosis(soft soled footwear) is an effective treatment for painful heel syndrome.

Keywords: local ultrasound, steroid cream, plantar fasciitis, heel pain, phonophoresis, painful heel syndrome.

INTRODUCTION

Painful heel syndrome (Plantar fasciitis) is a common condition. It is treated with analgesics supplemented with the various conservative methods such as contrast bath, soft soled footwear (orthosis), plantar stretching exercises and steroid injection. But except for the steroid injection, other modalities have not been shown to be effective in various randomized control trials (4). Steroid injections, sometimes 3 to 4, are required for pain relief in many cases of painful heel syndrome. Steroid injections have side effects such as plantar fascia rupture and calcaneal osteomyelitis (3). The role of steroid is well established in treatment of painful heel syndrome (4). Local ultrasound alone is not more effective than placebo in painful heel syndrome (3). Recently a study depicting the role of phonophoresis using analgesic cream for treatment of painful heel syndrome has concluded that this treatment gives good results (1). But it required on an average 8 – 10 sessions for relief in pain. So we studied phonophoresis using steroid cream to see its effect in reducing the number of visits and if it provided comparative results.

MATERIALS AND METHODS

All patients coming to the SSG hospital OPD in the months of September – October 2011 with symptoms of heel pain were treated with a combined regimen of soft footwear (to be worn throughout the day), contrast bath (three times a day) and one / two sessions of local ultrasound

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Informed consent was taken from patients. All patients were informed and explained about the various treatment options and the study treatment plan. Study design: Prospective Observational Study. Sample size: Based on feasibility criteria Study population: Patients coming to OPD in the Department of Orthopaedics, Medical College and S.S.G. Hospital, Vadodara. Outcome parameters: Periodic assessment clinically was done according to VAS (Visual Analogue Scale) for pain. Inclusion Criteria: Patients with symptoms of painful heel syndrome for more than a month extending up to one year were included in study Exclusion Criteria: The patients with associated low back pain or multiple joint pains or systemic disease requiring analgesics were excluded Unwilling patient Method of Treatment: In phonophoresis using steroid cream, we use around 5gm of steroid cream and 10gm of ultrasound gel with continuous ultrasound of 3 Mhz frequency and massage for around 5 minutes. They were administered Visual Analogue Scale (VAS) for pain at commencement of treatment and were followed up on an average one month later (one month to two and half months) for improvement in symptoms. No analgesics were prescribed.

RESULTS

33 patients were recruited (14 females and 19 males). 27 patients had excellent outcome with cessation of symptoms of heel pain. Wearing of soft soled footwear was advised to prevent recurrence. VAS scores improved from on an average 4 – 6 to zero. There were no local site problems noted due to steroid cream application or local ultrasound.
DISCUSSION
Plantar fasciitis can be treated with many conservative methods like contrast bath, local ultrasound, plantar stretching exercises, soft soled footwear (orthosis), local ultrasound with analgesic gel, steroid injection. The results of steroid injection are good but side effects and fact that it has to be administered with injection makes it less acceptable. The delivery of steroid to local tissue with help of local ultrasound has been excellent as suggested by results and so phonophoresis with steroid cream with other conservative methods is a viable strategy in treated painful heel syndrome.

CONCLUSION
The treatment consisting of phonophoresis using steroid cream along with contrast bath and orthosis (soft soled footwear) is an effective treatment for painful heel syndrome. Acknowledgment: We specially thank Dr. Rajiv Daveshwar, M.S Orthopaedics, professor & Superintendent, Medical college & SSG Hospital, Vadodara for his valuable support to carry out and fulfil this research.

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