

Research Article

Comparison Study on treatment of Plantar Fasciitis of Foot with Local Steroids Injections and Syptomatic Treatment with Analgesics

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ABSTRACT

Objective: To determine the efficacy of local steroid injection in the treatment of plantar fasciitis when compared with traditional treatment with analgesics.

Study Design: This is a prospective randomized controlled trial

Place and Duration: The Study was performed in the Orthopedic Department of Bahawal Victoria Hospital, Bahawalpur for the period of 1 year from November 2016 to November 2017.

Materials and Methods: The patients were divided into two treatment groups. After the treatment is indicated, the lottery method and pain therapy were administered at weeks 1, 3 and 5 after random assignment of subjects between the groups.

Findings: The study was conducted in 52 patients with plantar fasciitis. The male to female ratio is 1: 1.73. The mean age was 44.11 years + 9.76 SD. Most of the patients were in the 31-45 age group. 1. pain was found to be significant in both groups at 0, 0, 0.000, and 0.000 p values on weeks 3 and 5, respectively.

Conclusion: Steroid local injection with conventional therapy is better than conventional treatment.

Keywords: steroids, plantar fasciitis, heel, sensitivity

INTRODUCTION

Plantar fasciitis is a common foot problem. It affects about 2 million people annually and affects 10-15% of the population throughout life. Plantar fasciitis is characterized by sharp, sharp and burning pain in the posteromedial part of the ball. Plantar fasciitis is believed to be the result of irritation of the fascia origin. The function of the plantar fascia is to provide static support to the foot's longitudinal arch and to assist dynamic shock absorption during foot plantar stroke. Repeated microtrauma at the root of the plantar fascia causes chronic inflammatory changes. This study was conducted to determine the efficacy of local steroid injections compared to conventional treatment with conventional therapy in the

treatment of plantar fasciitis compared to conventional treatment.

MATERIALS AND METHODS

BASED ON HOSPITAL This prospective study control trial was performed in the Orthopedic Department of Bahawal Victoria Hospital, Bahawalpur for the period of 1 year from November 2016 to November 2017 Orthopedics and Surgery of the Randomize both genders. Patients were selected according to the following inclusion and exclusion criteria.

Inclusion criteria baseline pain greater than 0, gender, patients between 20-70 years of age

Exclusion criteria 1 Any bleeding disorder (risk of bruising after injections) 2 Any dermatological

disease (not the result of plantar fasciitis treatment in Pakistan) around eczema or psoriasis and ankle. 3 septic arthritis of joint foot and ankle (can not assess the outcome of treatment with plantar fasciitis) 4 rheumatoid arthritis and gout (high risk of infection).

(a consequence of plantar fasciitis treatment can not be assessed in a recent history of a traumatic foot injury) • Diabetes mellitus (a steroid with an injection contraceptive) • Orthopedic remedies with heel pain at the department of the Orthopedic in Bahawal Victoria Hospital, Bahawalpur and all the patients who did so were included in the study. all the patients were informed and the patient's consent was received. Written, they were reported to be used for medical research and patients' purposes to protect the confidentiality of data collected in this way. Patients were randomly assigned to two groups or by lottery method in B. In Performa, the age, sexual profession and address of the patients were entered. Patients in group A (control group) were treated with conventional therapy only (ie, ibuprofen 400 mg three times a day and exercises), and group B patients received local steroid injection, ie methylprednisolone (InjDepo Medrol). 40 mg (Group B). The visual analogue score (VAS) on the treatment arm of the observer was taken by the blinded observer. Under stringent aseptic conditions, Depo Medrol infused 40 mg, 2% of the maximum sensitivity site under the ICC Lignocain aseptic technique of injecting. Then aseptic dressing was applied. Only one injection infiltration session was given. Visual Analogue

Table 1: Sex wise Comparison of both the Groups

Sex	Group		Total	P-value
	A	B		
Male	10 38.5%	9 34.6%	19 36.5%	0.5000
Female	16 61.5%	17 65.4%	33 63.5%	
Total	26 100.0%	26 100.0%	52 100.0%	

Scale is used to reduce pain in weight bearing. VAS ranges from 1 to 7 and 8 to 10 were considered mild, moderate and severe, respectively. VAS was recorded at weeks 1, 3 and 5 after treatment. Version 11 of the SPSS software was used to analyze the data. The mean ± SD for age was calculated, and a physiotherapy session was performed. The frequencies and percentages were presented with weight, gender, occupation, and pains. Chi-square test was used to compare group A (control group) and group B (intervention group) in terms of pain relief in the weight bed. P value ≤ 0.05 was considered statistically significant for the two groups. All results are presented in tables and graphs.

RESULTS

A total of 52 patients were divided into two equal groups, A and B, respectively. Patients in group A (control group) were treated only with conventional therapy (eg 400 mg ibuprofen and exercise three times a day). and patients in Group B received local steroid injections, ie methylprednisolone (InjDepo Medrol 40 mg) and 2% xylokamine ICC. Gender distribution showed that 10 (38.5%) of 26 patients were male, 16 (61.5%) were female, and B9 (34.6%) were male and 17 (65.4%). %) female. The ratio of males to females was 1: 1.73. Distribution of sex between groups is insignificant with p = 0,500 values. (Table 1) The mean age was 44.11 years + SD 9.76 ranging from 18 to 58 years. Group A was 10 years (38.5%) in the 18-30 age group, 31-45 in 13 (50%) patients and over 45 in 3 (11.5%) patients.

Group B was over the age of 45 years in 12 (46.2%) patients over 18-30 years, 10 (50%) and 4 (15.4%) patients within 31-45 years. The age distribution between the groups was also insignificant at 0.699 p-value. (Table 2)

Table 2: Age wise Distribution in Both the Groups

Age(in years)	Group	Group		Total	0.699
		A	B		
18-30		3 11.5%	4 15.4%	7 13.5%	
31-45		13 50.0%	10 38.5%	23 44.2%	
> 45		10 38.5%	12 46.2%	22 42.3%	
Total		26 100.0%	26 100.0%	52 100.0%	

The wise distribution of the profession was also meaningless with p = 0.324. Most of the patients were housewives. A group consisted of 9 (34.6%), 6 (23.1%) State Officers, 5 students (19.2%) and 6 students (23.1%). On the other hand, B group had 12 (46.2%), 8 (30.8%) public employees, 1 (3.8%) students and 5 (19.2%) employees. The issue was compared in two groups that were insignificant with p = 0.324 values. Table 3. After one week, 16 (61.5%) of the most patients had severe pain, 10 (38.5%) had moderate pain and no mild pain in the patient. Unlike Group A, there were a majority of patients in Group B.

Table 3: Occupation wise Distribution of Patients in both the Groups

Occupation	Group	Group		Total	P-value
		A	B		
House Wife		9 34.6%	12 46.2%	21 40.4%	0.324
Govt. Servant		6 23.1%	8 30.8%	14 26.9%	
Student		5 19.2%	1 3.8%	6 11.5%	
Labor		6 23.1%	5 19.2%	11 21.2%	
Total		26 100.0%	26 100.0%	52 100.0%	

There were mild pain in 12 (46.2%), moderate pain in 13 (50%) and severe pain in only 1 (3.8%). This suggests that the pain is highly significant at a p value of 0.000. (Table 4).

Table 4: Pain at 1st week in both the Groups

Pain at 1st week	Group	Group		Total	P-value
		A	B		
Mild			12 46.2%	12 23.1%	0.000
Moderate		10 38.5%	13 50.0%	23 44.2%	
Sever		16 61.5%	1 3.8%	17 32.7%	
Total		26 100.0%	26 100.0%	52 100.0%	

When pain was observed after the third week, group A had mild pain in 10 (38.5%) patients with severe pain, 14 (53.8%) middle and 2 (7.7%) patients. There was moderation in only one patient in both groups and there was mild pain in the remaining 25 (96.2) patients. Group A had significantly higher pain level than group B, with a value of $p = 0.000$. (Table 5).

Table 5: Pain at 3rd week In both the Groups

		Group		Total	P-value
		A	B		
Pain at 3 rd Week	Mild	2 7.7%	25 96.2%	27 51.9%	0.000
	Moderate	14 53.8%	1 3.8%	15 28.8%	
	Sever	10 38.5%		10 19.2%	
Total		26 100.0%	26 100.0%	52 100.0%	

When pain was seen in the last week, severe pain in group A (11.5%) fell to the patient, 16 (61.5%) were mild in the patient, and 7 (26.9%) patients had mild pain. In group B he saw the same results recorded in 3 weeks. However, pain in group A was significantly higher at $p = 0.000$ than in group B at a significant level. (Table 6)

Table 6: Pain after 5th week in both the Groups

		Group		Total	P-value
		A	B		
Pain at 5 th Week	Mild	7 26.9%	25 96.2%	32 61.5%	0.000
	Moderate	16 61.5%	1 3.8%	17 32.7%	
	Sever	3 11.5%		3 5.8%	
Total		26 100.0%	26 100.0%	52 100.0%	

DISCUSSION

Plantar fasciitis is one of the most common conditions affecting the foot, and adults have been reported to account for 15% of all complaints requiring professional attention. It usually occurs in the 40 to 60 age group, but is reported in people between 7 and 85 years of age and is more common in women. Our results are almost the same with 36.5% of women compared to 63.5% of men. Much of the international work has been done in literacy communities with good patient compliance, and we have encountered some

problems during this study. Many patients who informed us have taken many medicines on their own and most have not been socioeconomic classes and literate. The extended position is usually based on the theory that the long-term pulling power of the plantar fascia, as a spatial factor of plantar fasciitis, makes the individuals suitable for the situation. There is no data showing which activities are frequently performed while standing and the nature of the stresses placed on the lower extremity for this reason. This is the first study to examine in detail the position in the

locus, to use the Profession Classification Scale to measure tension on the heel, and to show that the wife and the task have more pain on the heel compared to state employees and employees. students. In our study, this factor remained constant in both groups to control the confounding factor. For this reason, occupation was meaningless in both groups. Conservative treatment has shown a wide range of acceptable outcomes with success rates ranging from 46% to 100%. However, 20% to 30% of patients treated with conventional measures are progressing to a chronic condition. When the situation becomes chronic, any treatment response becomes less predictable. Treatment of chronic plantar fasciitis is prolonged and recurrence is widespread. One of the studies has shown that the administration of two modalities, i.e. traditional and local steroids, is effective in the treatment of this painful condition of the plantar fasciitis of the foot, and these results are described by Nuefeld SK et al. arc. In our experience, we found that the success rate of non-surgical treatment of plantar fasciitis by using these treatment modalities was 90% and that our results were comparable to almost 93% during the fifth week of outcomes. treatment. Nuefeld SK and Rebecca Cerrito emphasize that 90% of foot plantar fasciitis patients respond to non-surgical treatment methods such as local steroid injection, non-steroidal anti-inflammatory drugs and conservative treatment. When we use these treatment methods, we have the same result in our patients. Activity and stress modification can be effective up to 70% of people. The findings of a multicenter study supported by the American Orthopedic Foot and Tobil Association (AOFAS) confirm this finding. In this prospective, randomized, blinded study of 236 patients with isolated heel pain syndrome¹³, 72% were corrected by stretching alone during the 8-week study period. This number rose to 88% with simple heel insertion. Complementary treatments include plantar facial noviral splints, viscoelastic heels and non-steroidal anti-inflammatory drugs for initial treatment. Supported by Wapner and colleagues, the plantar fascia's night jumpers support the wrist at five degrees of dorsiflexion

while the patient is lying. This serves to protect the elongated plantar fascia and serves to break the recurring fracture cycle of soft tissues. Blocking, corticosteroids and foot plaster injections may be necessary in recalcitrant cases. Release is reported to release tension on the plantar fascia while supporting its weight, and is reported to be more effective than 50% of patients who might otherwise be candidates for surgery.¹⁵ Studies have shown that corticosteroids are effective in 35% to 77% of corticosteroids; However, the results are often temporary. Complications reported with steroid injections include plantar fascial rupture and atrophy of the heel padding.

CONCLUSION

This study shows that the majority of patients are women and their partners. Middle age is exposed to more plantar fasciitis. This study presents high quality evidence for the pharmacological effect of Depomedrol 40 mg injection in combination with conventional therapy in the treatment of plantar fasciitis.

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