

Clinical Trial Protocol

Iranian Registry of Clinical Trials

18 Sep 2026

Comparison of the effect of kinesio tape and low dye tape on pain and function in patients with plantar fasciitis

Protocol summary

Study aim

The effect of kinesio tape and low dye tape on pain and function of patients with plantar fasciitis

Design

A clinical trial with a control group, parallel groups, single-blind, randomized, on 60 patients, block randomization method was used for randomization.

Settings and conduct

This study is a single blind randomized clinical trial . The study population includes people who will refer to the sports medicine department of Imam Khomeini Hospital.

Participants/Inclusion and exclusion criteria

Inclusion criteria: Being 20 to 75 years old No history of any disease or bone fracture or surgery that affects the development, diagnosis and treatment of plantar fasciitis. Patient informed consent Exclusion criteria: Having a history of any disease or bone fracture and surgery that affects the development, diagnosis and treatment of plantar fasciitis. Dissatisfaction with enrollment

Intervention groups

The control group under typing with low dye tape and the intervention group under typing with kinesio tape type

Main outcome variables

Pain and Foot function in everyday life

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20201130049545N1**

Registration date: **2020-12-11, 1399/09/21**

Registration timing: **registered_while_recruiting**

Last update: **2020-12-11, 1399/09/21**

Update count: **0**

Registration date

2020-12-11, 1399/09/21

Registrant information

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Name of organization / entity

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Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2020-03-20, 1399/01/01

Expected recruitment end date

2021-03-19, 1399/12/29

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of the effect of kinesio tape and low dye tape on pain and function in patients with plantar fasciitis

Public title

Comparison of the effect of kinesio tape and low dye tape on pain and function in patients with plantar fasciitis

Purpose

Other

Inclusion/Exclusion criteria

Inclusion criteria:

Being 20 to 75 years old No history of ankle or heel fractures No history of ankle surgery No diabetes Do not

use nonsteroidal anti-inflammatory drugs (NSAIDs) for one week prior to enrollment Do not use orthoses from the time of diagnosis until enrollment Not having any neuromuscular damage in the lower extremities that affects daily activities Do not have any painful lesions on the foot such as bunion or cerebellum or nail growth in the tissues around the nail No congenital defects in the lower extremities Existence of pain in the heel for at least one month with Vas greater than or equal to 4 at the time of examination No open sores on the soles of the feet and heels Exclusion criteria: Positive tunnel sign History of systemic inflammatory disease and connective tissue History of hernia with S1 radiculopathy History of gout History of surgery or injection in the last 6 months Pain in the back of the heel associated with Achilles bursitis Dissatisfaction with enrollment Age From 20 years old to 75 years old Gender Both Phase N/A Groups that have been masked Participant	explained to all patients and the people who filled out the informed consent will enter the project. For all patients, the relevant checklist will be filled in first including demographic information (age, sex, height, weight, body mass profile, level of physical activity, occupation, education, time of onset of pain) and plantar fasciitis risk factors. Comprehensive physical and neurological evaluations will be performed for all patients to rule out other clinical causes of foot and heel pain. All patients will also be asked about their medical history, previous medical history, and underlying medical conditions, and their findings will be carefully recorded. Then the amount of morning pain and daily pain will be marked separately by VAS criteria. Patients will determine their pain intensity based on the VAS as a degree from the 10 cm line. The patient should have at least 40 mm of pain. The American Orthopedic Foot and Ankle Scale (AOFAS) will also be used to assess performance. For pre-tape people, the pain scale is based on the VAS questionnaire and the American Foot and Ankle Association Scale (AOFAS), a clinical assessment system that measures pain and patient performance based on patient and physician perceptions, regardless of radiographic results. Will be taken. An hour later, the pain will be measured again on the above scales. 72 hours later, patients will return for taping, and before that, the above scales will be re-examined for pain.
Sample size Target sample size: 60 Randomization (investigator's opinion) Randomized Randomization description Patients will be divided into two groups using the Permuted Block Randomization method. The website https://www.sealedenvelope.com will be used to create a random sequence in the block randomization approach. Also, to hide the allocation concealment, a random sequence is provided to a specific person. The researcher then contacts the person based on the order in which the participants enter the study and asks about the random assignment of the participant to a specific group. For each intervention, a number (code) is defined and inserted on the envelope according to the random sequence created. Blinding (investigator's opinion) Single blinded Blinding description Before entering the study, the research conditions will be explained to all patients and the people who filled out the informed consent will enter the project. In this study, patients will be divided into two groups using a table of random numbers. Patients will not be informed about the type of tape used and the study is one-sided blind, but other people, including Hori and the researcher of the project, are fully aware of the type of patients. Placebo Not used Assignment Parallel Other design features Before entering the study, the research conditions will be	Secondary Ids empty Ethics committees 1 Ethics committee Name of ethics committee Ethics committee of Tehran University of Medical Sciences Street address Research assistant , Ghods Street , Keshavarzi Boulevard , Tehran Town City Tehran Province Tehran Postal code 1417613151 Approval date 2020-04-30, 1399/02/11 Ethics committee reference number IR.TUMS.MEDICINE.REC.1399.035 Health conditions studied 1 Description of health condition studied Plantar fasciitis ICD-10 code M72.2

ICD-10 code description

Inflammation of the plantar fascia

Primary outcomes

1

Description

Pain is a quantitative variable measured by the Visual Analogue Scale.

Timepoint

The measurement of the variable at the beginning of the study is before the intervention and one hour after the intervention and 72 hours after.

Method of measurement

Visual analogue scale

Secondary outcomes

1

Description

Ankle function is a variable measured by the AOFAS questionnaire

Timepoint

The variable is measured before the intervention and one hour after the intervention and 72 hours after

Method of measurement

The American Orthopaedic Foot & Ankle Scale

Intervention groups

1

Description

Intervention group: Kase technique will be used in the kinesio tape group. The type used for patients will be 2-inch tape. This brigade has been approved by Dr. Kase, the creator of this technique. Two tapes of the Kinesio tape will be measured and cut. A strip from the base of the calcaneus to the metatarsals will be measured and divided into 4 to 6 strips at the end of the tip. Another strip will be measured from the outer side of the foot above the cuboid, below the plantar surface of the foot and in the antromedial direction of the distal third of the tibia. This strip will be cut I-shped with rounded corners. While the foot is in the dorsiflexion position, the tip is glued to the bottom of the heel without any stretching. The last 4 strips of the first strip will be glued to the beginning of the plantar surface with 15 to 25% tension on the beginning of the metatarsals. The second band of the Kinesio tape is I-shped on the lateral surface of the foot without any stretching and then while the foot is in the dorsiflexion position, the tape will be attached obliquely to the arch of the sole of the foot with 25% tension. The rest of the tip will be applied on the medial surface of the wrist with 15 to 25% tension. The patient will be asked to refrain from getting water on the body while it is on the body, and to be careful not to detach it from the skin while wearing the garment. In the next session, the brigade will be removed from the skin by the

therapist and the subject will be carefully examined for possible skin allergies.

Category

Treatment - Devices

2

Description

Control group: In the low-dye group, this 1.5-inch tape is with the best quality straps that are of the best quality and are used by athletes around the world. Working with a zinc oxide cloth adhesive is one inch wide and is done in five steps. The starting point is the outer edge of the foot just below the little toe. The glue starts from this place and goes down to the outer edge of the foot and passes behind the heel and returns to the first place under the sole of the foot. The glue should not wrinkle on the skin, otherwise it will cause blistering. The same is done for the inside of the foot and starts from the inside of the foot just below the big toe and goes from the inside of the foot to the back of the heel and returns to its first place through the sole of the foot. Then with a series of glue We cover the transverse holes in the sole of the foot with the previous adhesives

Category

Treatment - Devices

Recruitment centers

1

Recruitment center

Name of recruitment center

Emam khomeyni Hospital

Full name of responsible person

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

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Full name of responsible person

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Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Tehran University of Medical Sciences
Proportion provided by this source
100
Public or private sector
Public
Domestic or foreign origin
Domestic
Category of foreign source of funding
empty
Country of origin
Type of organization providing the funding
Academic

Person responsible for general inquiries

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
Yes - There is a plan to make this available
Study Protocol
Yes - There is a plan to make this available
Statistical Analysis Plan
Yes - There is a plan to make this available
Informed Consent Form
Yes - There is a plan to make this available
Clinical Study Report
Yes - There is a plan to make this available
Analytic Code

Yes - There is a plan to make this available
Data Dictionary
No - There is not a plan to make this available
Title and more details about the data/document
After completing the study
When the data will become available and for how long
After completing the study
To whom data/document is available
There is no limit

Under which criteria data/document could be used
Send resume and reason for requesting data
From where data/document is obtainable
drelhamkarimi89@gmail.com Belongs to Elham Karimi Shervedani
What processes are involved for a request to access data/document
Send the request and use the data to the email address listed
Comments