Clinical Trial Protocol
Iranian Registry of Clinical Trials

09 Nov 2026

The effect of acupressure on level of insulin and fasting blood sugar in type 2 diabetic patients referred to the diabetes clinic in Rafsanjan 2016

Protocol summary

Summary

Introduction: Diabetes mellitus type II is a global health problem that it is expected, in 2030, the number of afflicted people will reach 4.4 percent of world population. If the symptoms are not controlled properly, they will make problems and risks for the individual, family, society and health system. Many ways are available to control the symptoms of Diabetes mellitus type II including: changing the life style through doing exercise, taking proper diets and taking edible drugs or insulin injections. Following each of these ways has its own difficulties. Acupressure is one of the non-pharmacological methods of treatment that its use is safe, it has no side effects and does not require special equipment and costs. While reviewing the existing texts, few studies on the application of acupressure were found. Most of existing reports has emphasized the effect of acupressure on the level of blood sugar. Therefore, this study has been designed with the aim of determining the effect of acupressure on the levels of insulin and blood sugar in the patients with type II diabetes who attended the Diabetes Clinic of Rafsanjan, Iran in 2016. Methodology: This study is a Randomized clinical trial type that 70 of all the patients by considering the ethics and based on inclusion and exclusion criteria are chosen intellectually, and they are placed by categorical random way in two groups of intervention and control. At the beginning, the blood sample of two groups will be exsanguinated in order to determine their insulin and fasting blood sugar level. In the group of control, no intervention except the normal clinical cares (maintaining a diabetic diet, one-hour regular walking, going to bed every night before 10 o'clock, keeping calm and avoiding stress) and medical orders prescribed by the doctor will not be done. The intervention group, in addition to the aforementioned items, will receive acupressure treatment in the assumed points for study. The used points for study are LIV3, ST36, SP6, KD3, and the timing of each pressure would be 5minutes for 20 minutes a day. This action will be done for three weeks and the time of action is determined to be 10 o'clock in the morning of every day. Immediately, after finishing this course, insulin and fasting blood-sugar level of the two groups of intervention and control will be measured. After collecting the data, the data will be processed and analyzed by Spss software, version 18.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2016122131459N1**
Registration date: **2017-02-22, 1395/12/04**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date

2017-02-22, 1395/12/04

Registrant information

Name

Asieh Zarvasi

Name of organization / entity

Rafsanjan University of Medical Sciences and Health Services, Rafsanjan

Country

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Recruitment status

Recruitment complete

Funding source

Rafsanjan University of Medical Sciences and Health Services, Rafsanjan

Expected recruitment start date
2016-05-21, 1395/03/01
Expected recruitment end date
2017-01-20, 1395/11/01
Actual recruitment start date
empty
Actual recruitment end date
empty
Trial completion date
empty

Scientific title
The effect of acupressure on level of insulin and fasting blood sugar in type 2 diabetic patients referred to the diabetes clinic in Rafsanjan 2016

Public title
The effect of acupressure on level of insulin and fasting blood sugar in type 2 diabetic patients referred to the diabetes clinic in Rafsanjan 2016
Purpose
Supportive
Inclusion/Exclusion criteria
Inclusion criteria: 1. Registering type II diabetes clinical medical records 2. Lack of activity and disability for interventional procedures 3. Absence of abnormality in pressure points 4. Not taking insulin injections 5. No untreated hypertension 6. Normal BMI and overweight body mass index (9 / 29-5 / 18). 7. Signing informed consent to participate in the study. 8. Lack of cognitive disorders to learn and follow the interventional procedure during specified period of time. 9. No pregnancy. 10. Not taking any drugs and herbal medicines that affect blood sugar levels. 11. Not suffering from advanced neuropathy. Exclusion criteria: 1. Infectious diseases 2. Receiving drugs that affect blood sugar levels (blood glucose lowering drugs: acetaminophen, anabolic steroid, Clofibrate, Dyzvpyramyd, gemfibrozil, insulin, inhibitors of MAO, pentamidine, propranolol. Drugs increasing blood sugar: thyroxine,Diazoxide, estrogens, glucagon, isoniazid, salicylates, triamterene, benzodiazepines, beta blockers, epinephrine, furosemide, glucocorticoids, glucose, lithium, birth control pills, technical-Tween, thiazide diuretics.) 3. Disorders of other endocrine glands. 4. Hang antidiabetic drugs. 5. Inability to do interventional procedures and forgetting even one turn during the specified period of acupressure. 6. The emergence of topical problems in the localized pressure points of research. 7. Withdrawal from further participation in the intervention. 8. Sharp and sudden change in the general situation of patients that is associated with changes in blood sugar levels. 9. Failure to comply with the terms of the research study (receiving regular medication regimen, maintaining a diabetic diet,one-hour regular walking,going to bed every night before 10 o'clock, keeping calm and avoiding stress).
Age
No age limit
Gender
Both

Phase
N/A
Groups that have been masked
No information
Sample size
Target sample size: **70**
Randomization (investigator's opinion)
Randomized
Randomization description
Blinding (investigator's opinion)
Not blinded
Blinding description
Placebo
Not used
Assignment
Parallel
Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Rafsanjan University of Medical Sciences and Health Services
Street address
Rafsanjan University of Medical Sciences and Health Services, Imam ali boulvard
City
Rafsanjan
Postal code
Approval date
2016-07-20, 1395/04/30
Ethics committee reference number
IR.RUMS.REC.1395.60

Health conditions studied

1

Description of health condition studied
Type 2 diabetes
ICD-10 code
E10-14
ICD-10 code description
Diabetes mellitus

Primary outcomes

1

Description
Fasting blood sugar
Timepoint
Pre intervention and 21 days after that
Method of measurement
Pars azmoon lab kit

2

Description
Insulin level in blood
Timepoint
Pre intervention and 21 days after that
Method of measurement
Insulin kit

Secondary outcomes

empty

Intervention groups

1

Description
Acupressure and maintaining a diabetic diet, one-hour regular walking, going to bed every night before 10 o'clock, keeping calm and avoiding stress
Category
Other

2

Description
Maintaining a diabetic diet, one-hour regular walking, going to bed every night before 10 o'clock, keeping calm and avoiding stress
Category
Other

Recruitment centers

1

Recruitment center
Name of recruitment center
Diabetes clinic in Ali Ebne Abitaleb hospital of Rafsanjan city
Full name of responsible person
Dr. Balaie
Street address
Ali Ebne Abitaleb hospital
City
Rafsanjan

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Rafsanjan University of Medical Sciences and Health Services
Full name of responsible person
Tayebe Negahban Banaie
Street address
Rafsanjan University of Medical Sciences and Health Services, Imam Ali blvd.
City
Rafsanjan
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Rafsanjan University of Medical Sciences and Health Services
Proportion provided by this source
100
Public or private sector
empty
Domestic or foreign origin
empty
Category of foreign source of funding
empty
Country of origin
Type of organization providing the funding
empty

Person responsible for general inquiries

Contact
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Sharing plan

Deidentified Individual Participant Data Set (IPD)
empty
Study Protocol
empty
Statistical Analysis Plan
empty
Informed Consent Form
empty
Clinical Study Report
empty
Analytic Code
empty
Data Dictionary
empty