Clinical Trial Protocol
Iranian Registry of Clinical Trials

07 Nov 2026

Clinical trials The effectiveness of acupressure on pain and anxiety in cancer patients undergoing bone marrow aspiration and biopsy

Protocol summary

Summary

This study is a clinical trial that examines the acupressure effect on pain and anxiety in cancer patients undergoing bone marrow biopsy. The participants will be randomized into three groups of 30 patients (intervention, control and placebo). Inclusion criteria were: age 18 to 65 years, undergo bone marrow biopsy for the first time, the lack of previous experience in acupressure or acupuncture and exclusion criteria included having a platelet count less than 100,000 milligrams per deciliter. In the experimental group, the acupressure will be performed on the LI4 (anti-pain point) and the He7 (anti-anxiety point) for 1 minutes in during and after the biopsy. In the placebo group, the acupressure will be performed on the same points at a distance of 1.5 cm from the main points. No procedure will be performed in the control group. Before biopsy, all patients complete Spielberger anxiety questionnaire and the vital signs will be recorded. The pain will be measured using a visual analogue scale (VAS) in 3 groups, before, during and after the biopsy. Also will be re-measured amount of anxiety and vital signs after the biopsy

General information

Acronym

-

IRCT registration information

IRCT registration number: **IRCT2016080229159N1**
Registration date: **2017-04-27, 1396/02/07**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date

2017-04-27, 1396/02/07

Registrant information

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Name of organization / entity
Babol University of Medical Sciences
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Recruitment status

Recruitment complete

Funding source

Vice chancellor for research, Babol University of Medical Sciences

Expected recruitment start date

2016-12-10, 1395/09/20

Expected recruitment end date

2017-03-07, 1395/12/17

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Clinical trials The effectiveness of acupressure on pain and anxiety in cancer patients undergoing bone marrow aspiration and biopsy

Public title

The effect of acupressure on severity of pain and anxiety

Purpose

Supportive

Inclusion/Exclusion criteria

Inclusion criteria:Having a pathology confirms the person with cancer; Having full consciousness; Age 18 to 65 years years; Avoiding the use of anxiolytic and analgesic

medications 12 hours before the procedure; No barrier in place Acupressure such as IV line, ulcer at the site of compression; Bone marrow biopsy is done for the first time;The lack of visual impairment to see a visual scale for pain intensity; Having reading and writing literacy needed for completing the questionnaire; having no experience or knowledge about acupressure. Exclusion criteria: the platelets level decreases to less than 100000 mg/dL, any problem or accident happens during the biopsy and unwillingness for cooperation to be continued.

Age
From **18 years** old to **65 years** old

Gender
Both

Phase
2

Groups that have been masked
No information

Sample size
Target sample size: **90**

Randomization (investigator's opinion)
Randomized

Randomization description

Blinding (investigator's opinion)
Not blinded

Blinding description

Placebo
Used

Assignment
Parallel

Other design features
This study uses a sampling method, 90 patients were randomized into 3 groups of 30 blocks, a group of acupressure, placebo and one group studied the routine care

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Ethics committee of Babol University of Medical Sciences

Street address
Babol University of Medical Sciences, Gangafrooz Street, Babol, Mazandaran

City
Babol

Postal code
4717647745

Approval date
2016-11-09, 1395/08/19

Ethics committee reference number
MUBABOL.HRI.REC.1395.39

Health conditions studied

1

Description of health condition studied
neoplasm

ICD-10 code
C00, C01,

ICD-10 code description
Malignant neoplasms

Primary outcomes

1

Description
pain

Timepoint
Before biopsy, during biopsy, immediately after the biopsy

Method of measurement
vas(Visual Analogue Scale)

2

Description
Anxiety

Timepoint
Before and after biopsy

Method of measurement
Spielberger questionnaire

Secondary outcomes

empty

Intervention groups

1

Description
In the experimental group, acupressure will be applyin “Hugo” point or LI4 which is located in the hand, between the first and second metacarpal bones and the seventh heart or He7 which is located in the transverse fold of wrist which is directly in contact with flexor tendon, Carmen Ulnarys for 1 minute to will be done symmetrically on both hands.

Category
Other

2

Description
In the placebo group, the acupressure will be performed on the same points at a distance of 1.5 cm from the main points,for 1 minute to will be done symmetrically on both hands that these points will be ineffective and will have no effect on anxiety and pain .

Category
Other

3

Description
Control group, No procedure will be performed in the control group.
Category
Other

Recruitment centers

1

Recruitment center
Name of recruitment center
Emam Sajad Hospital of Ramsar
Full name of responsible person
moloud sharifi
Street address
Motahhari Street, Revolution Square, Ramsar, Mazandaran
City
Ramsar

2

Recruitment center
Name of recruitment center
Personal office of Doctor Keyhanian
Full name of responsible person
moloud sharifi
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Shiroodi Square, Tonkabon, Mazandaran
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Vice Chancellor for research of Babol University of Medical Sciences
Full name of responsible person
Ali Akbar Moghadamnia
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Babol University of Medical Sciences, Gangafrooz Street, Babol, Mazandaran
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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
Vice Chancellor for research of Babol University of Medical Sciences
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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Babol University of Medical Sciences
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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