Clinical Trial Protocol
Iranian Registry of Clinical Trials

17 Sep 2026

Comparison Lumbar posture, trunk muscle activation and comfort during working with a microscope when sitting on a saddle chair and traditional chair.

Protocol summary

Summary

Objectives: Low back pain (LBP) is a common musculoskeletal disorder and prolonged sitting often aggravates LBP. A novel saddle chair, which facilitates less hip flexion while sitting on an unstable base has been developed. This study will compare lumbar posture on this novel saddle chair with a standard laboratory chair. Design: Twelve (7 F, 5 M) pain-free participants will recruit from the local community. All participants will provide writ inform consent. Participants will age over 18 years, will not pregnant, had no LBP in the last two years, no previous spinal surgery, no current pain medications and will not undertaken previous postural control training. All participants will ask with two chair and postural data will collect using a electrogoniometer. Lumbar flexion/extension will measure with electrogoniometry with two chair. Setting and conduct: Lumbar posture will measure with electrogoniometry method and were analyzed using paired t-tests. Postural data will collect using an electrogoniometer. Lumbar flexion/extension will measure with electrogoniometry with two chair. Participants including major eligibility criteria: Twelve (7 F, 5 M) pain-free participants will recruit from the local community. All participants will provide writ inform consent. Participants will age over 18 years, will not pregnant, had no LBP in the last two years, no previous spinal surgery, no current pain medications and will not undertaken previous postural control training. Intervention: Intervention in this study will the use of saddle chair and common chair. Intervention was provided for each person, with a saddle chair and common chair at the during electrogoniometry test. Main outcome measures: Compare the lumbar posture of this novel saddle chair with a standard backless laboratory chair during a microscope task.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2015051122207N1**
Registration date: **2015-10-11, 1394/07/19**
Registration timing: **registered_while_recruiting**

Last update:
Update count: **0**

Registration date

2015-10-11, 1394/07/19

Registrant information

Name

Yasser Labbafinejad

Name of organization / entity

Iran University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 21 8862 8605

Email address

labbafinejad.y@iums.ac.ir

Recruitment status

Recruitment complete

Funding source

IUMS

Expected recruitment start date

2015-09-23, 1394/07/01

Expected recruitment end date

2015-11-22, 1394/09/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title
Comparison Lumbar posture, trunk muscle activation and comfort during working with a microscope when sitting on a saddle chair and traditional chair.

Public title
Comparison Lumbar posture, trunk muscle activation and comfort during working with a microscope when sitting on a saddle chair and traditional chair.

Purpose
Other

Inclusion/Exclusion criteria
Inclusion: Participants will age over 18 years, will not pregnant, had no LBP in the last two years, no previous spinal surgery, no current pain medications and will not undertaken previous postural control training. exclusion: Lack of any of the above conditions.

Age
No age limit

Gender
Both

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **12**

Randomization (investigator's opinion)
N/A

Randomization description

Blinding (investigator's opinion)
Not blinded

Blinding description

Placebo
Not used

Assignment
Single

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Iran University of Medical Sciences Ethics Committee

Street address
Hemmat

City
Tehran

Postal code

Approval date
2015-07-01, 1394/04/10

Ethics committee reference number
IR.IUMS.REC.1394.25084

Health conditions studied

empty

Primary outcomes

1

Description
Comfort

Timepoint
2 hourse

Method of measurement
Self Report

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group using each kind of seat and finally evaluation of comfort and posture with electrogoniometer is done. In fact, this is not the sham and control groups. And each participant to work with two chairs.

Category
Other

Recruitment centers

1

Recruitment center

Name of recruitment center
Iran University of Medical Sciences

Full name of responsible person

Street address

City
Tehran

Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Vice Chancellor for Research of Iran University of Medical Sciences

Full name of responsible person
Seyed Ali Javad Mousavi

Street address
Iran University of Medical Sciences

City
Tehran

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 Iran 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

Name of organization / entity
Iran University of Medical Sciences

Full name of responsible person
Yasser Labbafinejad

Position
Associate Professor of Occupational Medicine Department

Other areas of specialty/work

Street address
Iran University of Medical Sciences

City
Tehran

Postal code

Phone
+98 21 8670 2516

Fax

Email
ylabbafinejad@yahoo.com

Web page address

Person responsible for scientific inquiries

Contact

Name of organization / entity
Iran University of Medical Sciences

Full name of responsible person
Yasser Labbafinejad

Position
Associate Professor of Occupational Medicine Department

Other areas of specialty/work

Street address
Iran University of Medical Sciences

City
Tehran

Postal code

Phone
+98 21 8670 2516

Fax

Email
ylabbafinejad@yahoo.com

Web page address

Person responsible for updating data

Contact

Name of organization / entity
Iran University of Medical Sciences

Full name of responsible person
Yasser Labbafinejad

Position
Associate Professor of Occupational Medicine Department

Other areas of specialty/work

Street address
Iran University of Medical Sciences

City
Tehran

Postal code
1449614535

Phone
+98 21 8670 3423

Fax
+98 21 8670 3423

Email
ylabbafinejad@yahoo.com

Web page address

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