

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

Comparison of the vestibulo-ocular reflex in patients with posterior semicircular canal benign paroxysmal positional vertigo before and after rehabilitation treatment assessed by video head impulse test

Protocol summary

Summary

(1) Objectives: to evaluate vestibulo-ocular reflex in each semicircular canal in patients with posterior semicircular canal benign paroxysmal positional vertigo (PSC-BPPV) before and after rehabilitation maneuver, (2) Design: non-randomized clinical trial, (3) Setting: Vertigo Rehabilitation Clinic, Audiology Department, Tehran University of Medical Sciences, Iran, (4) Participants: thirty patients with PSC-BPPV, (5) Method: measurement of vestibulo-ocular reflex (VOR) by vHIT in patients before and after Epley maneuver, (6) Intervention: Epley maneuver, (7) Main outcomes: VOR gain, gain asymmetry, saccades.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2016013126279N1**
Registration date: **2016-04-26, 1395/02/07**
Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2016-04-26, 1395/02/07

Registrant information

Name

Mansoureh Adel Ghahraman

Name of organization / entity

Country

Iran (Islamic Republic of)

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Recruitment status

Recruitment complete

Funding source

Tehran University of Medical Sciences (TUMS)

Expected recruitment start date

2016-01-21, 1394/11/01

Expected recruitment end date

2016-06-20, 1395/03/31

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of the vestibulo-ocular reflex in patients with posterior semicircular canal benign paroxysmal positional vertigo before and after rehabilitation treatment assessed by video head impulse test

Public title

Effects of rehabilitation treatment on vestibulo-ocular reflex

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: posterior semicircular canal benign paroxysmal positional vertigo; no other vestibular disorders; no cervical problem; no peripheral disorder in the right eye. Exclusion criteria: reluctant to cooperation during treatment sessions; no vertigo release after second rehabilitation session; occurrence of other vestibular disorders during study; feeling pain in cervical area during vHIT; nausea or vomiting during vHIT.

Age

No age limit

Gender

Both

Phase

N/A

Groups that have been masked*No information***Sample size**

Target sample size: 30

Randomization (investigator's opinion)

Not randomized

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**

Tehran University of Medical Sciences (TUMS)

Street address

Enqelab Ave.

City

Tehran

Postal code**Approval date**

2015-11-22, 1394/09/01

Ethics committee reference number

IR.TUMS.REC.1394.1210

Health conditions studied**1****Description of health condition studied**

Benign paroxysmal positional vertigo

ICD-10 code

H81.1

ICD-10 code description

Benign paroxysmal vertigo

Primary outcomes**1****Description**

mean vestibulo-ocular reflex gain in each semicircular canal

Timepoint

before and after treatment

Method of measurement

ICS impulse (GN Otometrics, USA)

2**Description**

Covert saccades

Timepoint

before and after treatment

Method of measurement

ICS impulse (GN Otometrics, USA)

3**Description**

Overt saccades

Timepoint

before and after treatment

Method of measurement

ICS impulse (GN Otometrics, USA)

4**Description**

gain symmetry

Timepoint

before and after treatment

Method of measurement

calculation

Secondary outcomes

empty

Intervention groups**1****Description**

With the patient sitting upright, the head is turned 45 degrees to the patient's affected side. The patient is then moved from the sitting position to the supine position with the head hanging below the top end of the examination table at an angle of 20 degrees. The head is turned 90 degrees toward the unaffected left side. The head is then turned another 90 degrees, to a face-down position, and the trunk is turned 90 degrees in the same direction, so that the patient is lying on the unaffected side. The patient is then moved to the sitting position. Each position should be maintained until the induced nystagmus and vertigo resolve, but always for a minimum of 30 seconds. The rehabilitation procedure is performed in maximum two sessions (with one week interval).

Category

Rehabilitation

Recruitment centers**1****Recruitment center****Name of recruitment center**

Vestibular assessment clinic, School of Rehabilitation, Tehran University of Medical Sciences (TUMS)

Full name of responsible person

Street address

City

Tehran

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Tehran University of Medical Sciences (TUMS)

Full name of responsible person

Shabnam Noroozadeh

Street address

Tehran University of Medical Sciences (TUMS)

City

Tehran

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 (TUMS)

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

Tehran University of Medical Sciences (TUMS)

Full name of responsible person

Mansoureh Adel Ghahraman

Position

PhD/ Faculty member

Other areas of specialty/work

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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