Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 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 vestibule-ocular reflex in each semicircular 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 vestibule-ocular reflex (VOR) by vHIT in patients before and after Epley maneuver, (6) Intervention: Eply 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

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Name of organization / entity

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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 vetibulo-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 rahabilitation 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 Noroozzadeh
Street address
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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

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Tehran University of Medical Sciences (TUMS)
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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