

Clinical Trial Protocol

Iranian Registry of Clinical Trials

07 Jul 2026

Comparison of the Supine and Lateral Position in Microvascular Decompression of Trigeminal Neuralgia

Protocol summary

retractor, complication, and cervical and facial pain

Study aim

Comparing the Supine and Lateral Position in Microvascular Decompression of Trigeminal Neuralgia

Design

In this clinical trial, a total of 28 patients in two groups of 14-patient (supine position group and lateral position group) are evaluated in parallel without the control group, in a single blinded and randomized study. For randomization and selection of patients for the two groups, the letters S (for supine) and the letter L (for lateral) were placed in a bag. The neurosurgeon removes one of the papers before admitting the patient, thus selecting the surgical site and the patient group was done. Patients are unaware of the surgical location and the study is a single blinded study.

Settings and conduct

In this study, patients with typical trigeminal neuralgia in two groups (supine and lateral position) underwent Microvascular Decompression (MVD) in Sina Hospital of Tehran, Iran.

Participants/Inclusion and exclusion criteria

Inclusion criteria: definite diagnosis of typical trigeminal neuralgia who candidate of MVD and age more than 18 years old, . Exclusion criteria: pregnancy, multiple sclerosis, diabetic mellitus, extra-cranial masses that put pressure on the trigeminal nerve, intra-cerebral lesions in the thalamus or trigeminal brain stem pathway, history of posterior fossa surgery, history of psychiatric illnesses such as psychosis and cognitive disorders, Patients with contraindications to MRI, People unable to express their problems, such as people with verbal disorders, history of stroke or partial body and face paresis

Intervention groups

Individuals are divided into two groups, one group undergoing surgery in the supine position and the other group in the lateral position.

Main outcome variables

Time of surgery, perioperative blood loss, Superior Petrosal Vein (SPV) ligation, application of brain

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20211127053187N1**

Registration date: **2021-12-01, 1400/09/10**

Registration timing: **registered_while_recruiting**

Last update: **2021-12-01, 1400/09/10**

Update count: **0**

Registration date

2021-12-01, 1400/09/10

Registrant information

Name

Hannan Ebrahimi

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 21 6312 0000

Email address

ebrahimi-h@razi.tums.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2021-11-27, 1400/09/06

Expected recruitment end date

2022-01-20, 1400/10/30

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of the Supine and Lateral Position in Microvascular Decompression of Trigeminal Neuralgia

Public title

Position in Microvascular Decompression of Trigeminal Neuralgia

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

definite diagnosis of typical trigeminal neuralgia who candidate of MVD

Exclusion criteria:

pregnancy multiple sclerosis diabetic mellitus extra-cranial masses that put pressure on the trigeminal nerve intra-cerebral lesions in the thalamus or trigeminal brain stem pathway history of posterior fossa surgery history of psychiatric illnesses such as psychosis and cognitive disorders Patients who had contraindications to MRI People who are unable to express their problems, such as people with verbal disorders history of stroke or partial body and face paresis

Age

From **18 years** old

Gender

Both

Phase

N/A

Groups that have been masked

- Participant

Sample size

Target sample size: **28**

Randomization (investigator's opinion)

Randomized

Randomization description

To select patients for the two groups, letters S (for Supine) and letters L (for Lateral) were placed in a bag. The neurosurgeon removes one of the papers before patient admission and thus the position of surgery was selected

Blinding (investigator's opinion)

Single blinded

Blinding description

Only Patients do not know the type of position during surgery. The neurosurgeon should be aware of the type of position before starting surgery and consider standard arrangements.

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of Tehran University of Medical Sciences

Street address

Hasan-Abad Square

City

Tehran

Province

Tehran

Postal code

1136746911

Approval date

2021-07-27, 1400/05/05

Ethics committee reference number

IR.TUMS.SINAHOSPITAL.REC.1400.059

Health conditions studied

1

Description of health condition studied

trigeminal neuralgia

ICD-10 code

G50.0

ICD-10 code description

Trigeminal neuralgia

Primary outcomes

1

Description

post operation complication

Timepoint

after surgery

Method of measurement

according to the findings after surgery in the next examination

2

Description

intraoperation blood loss

Timepoint

intraoperation time

Method of measurement

according to intraoperation

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group 1: patients with trigeminal neuralgia underwent Microvascular Decompression (MVD) in supine position. In this procedure, the patient is placed supine on the operating table and a roll is placed under the shoulder on the surgical side. The head is rotated 45 degrees contralaterally. Surgery is performed with a retrosigmoid incision.

Category

Treatment - Surgery

2

Description

Intervention group 2: patients with trigeminal neuralgia underwent Microvascular Decompression (MVD) in lateral position. In this method, the patient is placed laterally on the operating table and the surgical side is placed on top. The head is parallel to the ground. Surgery is performed with a retrosigmoid incision.

Category

Treatment - Surgery

Recruitment centers

1

Recruitment center

Name of recruitment center
Sina Hospital of Tehran, Iran

Full name of responsible person
Hannan Ebrahimi

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Tehran University of Medical Sciences

Full name of responsible person
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Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?

No
Title of funding source
nothing

Proportion provided by this source
100

Public or private sector
Public

Domestic or foreign origin
Domestic

Category of foreign source of funding
empty

Country of origin

Type of organization providing the funding
Academic

Person responsible for general inquiries

Contact

Name of organization / entity
Tehran University of Medical Sciences

Full name of responsible person
Hannan Ebrahimi

Position
Chief Resident

Latest degree
Medical doctor

Other areas of specialty/work
Neurosurgery

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Position
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Person responsible for updating data**Contact****Name of organization / entity**

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Full name of responsible person

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Position

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Sharing plan**Deidentified Individual Participant Data Set (IPD)**

Undecided - It is not yet known if there will be a plan to

make this available

Study Protocol

Undecided - It is not yet known if there will be a plan to make this available

Statistical Analysis Plan

Undecided - It is not yet known if there will be a plan to make this available

Informed Consent Form

Undecided - It is not yet known if there will be a plan to make this available

Clinical Study Report

Yes - There is a plan to make this available

Analytic Code

Undecided - It is not yet known if there will be a plan to make this available

Data Dictionary

Undecided - It is not yet known if there will be a plan to make this available

Title and more details about the data/document

All information obtained from the patient as well as the patient's name will remain confidential. The research results will be published in general and in the form of information of the study group, and individual results will be provided, if necessary, without mentioning the name and personal details.

When the data will become available and for how long

every time after finishing the research

To whom data/document is available

the design neurosurgeon

Under which criteria data/document could be used

The research results will be published in general and in the form of information of the study group, and individual results will be provided, if necessary, without mentioning the name and personal details.

From where data/document is obtainable

the design neurosurgeon

What processes are involved for a request to access data/document

The research results will be published in general and in the form of information of the study group, and individual results will be provided, if necessary, without mentioning the name and personal details.

Comments