

Clinical Trial Protocol

Iranian Registry of Clinical Trials

08 Jul 2026

GENERAL ANESTHESIA VERSUS CONSCIOUS SEDATION IN RECOVERY OUTCOMES OF PATIENTS UNDERGOING ENDOVASCULAR TREATMENT FOR POSTERIOR CIRCULATION STROKE

Protocol summary

Study aim

To compare the functional outcomes and adverse effects when using general anesthesia versus conscious sedation in patients undergoing endovascular treatment for posterior circulation stroke.

Design

The randomized controlled trial was carried out at Anesthesia Department of Combined Military Hospital Rawalpindi, PAK Emirates Military Hospital Rawalpindi

Settings and conduct

The study was conducted in Anesthesia Department of Combined Military Hospital Rawalpindi, PAK Emirates Military Hospital Rawalpindi

Participants/Inclusion and exclusion criteria

Included patients over the age of 18 years with a confirmed diagnosis of posterior circulation stroke (PCS) by CTscan or MRA with a modified Rankin score of 2 or less than 2 at the time of stroke and considered a suitable candidate for re-canalization within 24 hours of stroke onset. Included patients with massive intracranial hemorrhage, anterior circulation stroke, unclear radiological findings not consistent with acute posterior circulation stroke, a modified Rankin scale of more than 2 stroke onset, at pons midbrain index 3 or greater, patients with aspiration, fits, and intubation before EVT commencement and patient unwilling to be in the study or refusing follow up for the study protocol.

Intervention groups

The patients were divided into two groups, one to receive general anesthesia (GA) and other to receive conscious sedation (CS).

Main outcome variables

Functional outcome and disability in quality of life was assessed using the mRS(modified Rankin score), NIHSS(National Institute of Health Stroke Scale), GCS(Glasgow Coma Scale).

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20231211060337N2**

Registration date: **2024-02-16, 1402/11/27**

Registration timing: **retrospective**

Last update: **2024-02-16, 1402/11/27**

Update count: **0**

Registration date

2024-02-16, 1402/11/27

Registrant information

Name

Afzal Shabbir

Name of organization / entity

Armed Force Postgraduate Medical Institute (AFPGMI)

Country

Pakistan

Phone

+92 313 5158969

Email address

afzalshabbir68@gmail.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2023-08-16, 1402/05/25

Expected recruitment end date

2024-02-15, 1402/11/26

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

GENERAL ANESTHESIA VERSUS CONSCIOUS SEDATION IN RECOVERY OUTCOMES OF PATIENTS UNDERGOING ENDOVASCULAR TREATMENT FOR POSTERIOR CIRCULATION STROKE

Public title

GENERAL ANESTHESIA VERSUS CONSCIOUS SEDATION IN RECOVERY OUTCOMES OF PATIENTS UNDERGOING ENDOVASCULAR TREATMENT FOR POSTERIOR CIRCULATION STROKE

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Included patients over the age of 18 years with a confirmed diagnosis of posterior circulation stroke (PCS) by CTscan or MRA with a modified Rankin score of 2 or less than 2 at the time of stroke and considered a suitable candidate for re-canalization within 24 hours of stroke onset.

Exclusion criteria:

Included patients with massive intracranial hemorrhage, anterior circulation stroke, unclear radiological findings not consistent with acute posterior circulation stroke, a modified Rankin scale of more than 2 stroke onset, at pons midbrain index 3 or greater, patients with aspiration, fits, and intubation before EVT commencement and patient unwilling to be in the study or refusing follow up for the study protocol.

Age

No age limit

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: 120

Randomization (investigator's opinion)

Randomized

Randomization description

The patients were randomized into two groups of patients each, one to receive general anesthesia (GA group) and one to receive conscious sedation (CS group). Opaque sealed envelopes were used for randomization into the designated groups by a resident anesthetist unaware of the study protocol.

Blinding (investigator's opinion)

Not blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethical committee of combined Military Hospital

Street address

Tamizudin road lalkurti rawalpindi

City

Rawalpindi

Postal code

46000

Approval date

2023-08-01, 1402/05/10

Ethics committee reference number

CMH/RWP

Health conditions studied

1

Description of health condition studied

Posterior circulation stroke

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description

To compare the functional outcomes and adverse effects when using general anesthesia versus conscious sedation in patients undergoing endovascular treatment for posterior circulation stroke.

Timepoint

90 days

Method of measurement

mRS(modified Rankin score), NIHSS(National Institute of Health Stroke Scale), GCS(Glasgow Coma Scale).

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: patient in Group GA (n=60) received IV propofol 2mg/kg, IV Dexmedetomidine loading dose 1 mcg/kg over 10 minutes 15 minutes before starting the procedure with a maintenance dose of 0.5 mcg/kg/hr and IV Paracetamol 1 g state dose. IV Rocuronium was used to achieve muscle relaxation at a dose of 0.7 mg/kg

Category

Treatment - Other

2

Description

Intervention group: Patients in Group GS (n=60) received IV propofol 0.5mg/kg, IV Dexmedetomidine loading dose of 1 mcg/kg with the same maintenance dose as the GA group as well as IV Paracetamol.

Category

Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Combined Military Hospital Rawalpindi

Full name of responsible person

Dr Afzal shabbir

Street address

Tamizudin road lalkurti rawalpindi

City

Rawalpindi

Postal code

46000

Phone

+92 51 9273426

Email

afzalshabbir68@gmail.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Combined Military Hospital Rawalpindi

Full name of responsible person

Dr Khalid buland

Street address

Tamizudin road lalkurti rawalpindi

City

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Phone

+92 51 9273423

Email

afzalshabbir68@gmail.com

Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?

Yes

Title of funding source

Combined Military Hospital Rawalpindi

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

Combined Military Hospital Rawalpindi

Full name of responsible person

Afzal Shabbir

Position

Resident Anesthesia

Latest degree

Medical doctor

Other areas of specialty/work

Anesthesiology

Street address

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+92 313 5158969

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Person responsible for scientific inquiries

Contact

Name of organization / entity

Combined Military Hospital Rawalpindi

Full name of responsible person

Afzal Shabbir

Position

Resident Anesthesia

Latest degree

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Person responsible for updating data

Contact

Name of organization / entity

Combined Military Hospital Rawalpindi

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

Yes - There is a plan to make this available

Study Protocol

Yes - There is a plan to make this available

Statistical Analysis Plan

Yes - There is a plan to make this available

Informed Consent Form

Yes - There is a plan to make this available

Clinical Study Report

Yes - There is a plan to make this available

Analytic Code

Yes - There is a plan to make this available

Data Dictionary

Yes - There is a plan to make this available

Title and more details about the data/document

All data could be provided

When the data will become available and for how long

Data will be available for 2 years starting from Dec 2023 till December 2025

To whom data/document is available

Academic institutions

Under which criteria data/document could be used

Interventional studies being done on the same topic

From where data/document is obtainable

afzalshabbir68@gmail.com

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

Please contact the email provided above to ask for the data details

Comments