Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

GENERAL ANESTHESIA VERSUS CONSIOUS 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 consious 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

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+92 313 5158969

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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 CONSIOUS SEDATION IN RECOVERY OUTCOMES OF PATIENTS UNDERGOING ENDOVASCULAR TREATMENT FOR POSTERIOR CIRCULATION STROKE

Public title
GENERAL ANESTHESIA VERSUS CONSIOUS 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 consious 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
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+92 51 9273423
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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
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Person responsible for scientific inquiries

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Person responsible for updating data

Contact

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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