

Clinical Trial Protocol

Iranian Registry of Clinical Trials

29 Jun 2026

A Comparison of Dexmedetomidine and Propofol in sedation efficacy in patients with elective upper gastrointestinal endoscopy

Protocol summary

Study aim

Determine and comparison of Dexmedetomidine and Propofol in sedation efficacy in patients with elective upper gastrointestinal endoscopy

Design

Clinical trial phase3 with 2parallel groups, 3-sided blind, having balanced block randomization with considering gradual patient referral and sample size of 60

Settings and conduct

After obtaining written consent, patients who refers to Ali ibn Abitalib hospital for upper endoscopy, randomly assigned to 2groups of Dexmedomidine(D) and Propofol(P). Syringe of drugs will coded by an anesthetist who doesn't interfere with patient's sedation and evaluation process; it coded with a three-digit code, and patients divided according to the code for D or P group. Study is 3-sided blind, and patient, endoscopic physician, and person evaluating the symptoms are blinded to type of treatment group, and only a supervisor who prepares drugs and divides patients according to the code for each group, will know the treatment type received by patients.

Participants/Inclusion and exclusion criteria

Enter criteria:patients with elective upper gastrointestinal endoscopy with ASA class ≤ 3 Not-enter criteria:Having cardiovascular-liver- kidney- psychiatric disease, SBP<90, Drug Addiction, Egg and soy allergy, Emergency endoscopy

Intervention groups

In D group, Dexmedetomidine doses of 0.5 μ g/kg bolus and 0.7-0.5 μ g/Kg/hr infusion and in P group ,Propofol with doses of 0.5mg/kg bolus and 30 μ g/Kg/min infusion will given intravenously to patients. Patient hemodynamics will be checked and monitored from start of medication. Relaxation after taking drugs will asked using Ramsay Relaxation Scale from 0-5 (0-Restless,1-Relax,2-Sleepy,3-Confuse but Responded to Verbal Orders,4-No Response to Verbal orders,5-No Response to painful incitements) and will evaluated by an

anesthesiologist. After patient becomes alert, sedation satisfaction will be asked.

Main outcome variables

Sedation

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20190212042688N1**

Registration date: **2019-03-02, 1397/12/11**

Registration timing: **prospective**

Last update: **2019-03-02, 1397/12/11**

Update count: **0**

Registration date

2019-03-02, 1397/12/11

Registrant information

Name

Parnia Sayarfar

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 54 3329 5796

Email address

dr.sf.1458@zaums.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2019-03-15, 1397/12/24

Expected recruitment end date

2019-06-14, 1398/03/24

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

A Comparison of Dexmedetomidine and Propofol in sedation efficacy in patients with elective upper gastrointestinal endoscopy

Public title

Comparison of Dexmedetomidine and Propofol in sedation efficacy in patients with elective upper gastrointestinal endoscopy

Purpose

Treatment

Inclusion/Exclusion criteria**Inclusion criteria:**

patients with elective upper gastrointestinal endoscopy
ASA class ≤ 3

Exclusion criteria:

Having cardiovascular disease (arrhythmia, AS, IHD, HTN, HF or EF $< 30\%$)
Having liver disease (Child-Pugh Classification C)
Having kidney disease (GFR $< 60\%$)
Having psychiatric illness (Major Depression, Mania, Psychosis)
SBP < 90
Having Drug Addiction
Egg and soy allergy
Emergency endoscopy

Age

From **20 years** old to **70 years** old

Gender

Both

Phase

3

Groups that have been masked

- Participant
- Care provider
- Outcome assessor

Sample size

Target sample size: **60**

Randomization (investigator's opinion)

N/A

Randomization description**Blinding (investigator's opinion)**

Triple blinded

Blinding description

After obtaining written consent, patients who are elective for upper endoscopy are randomly assigned to two groups that are prescribed to a group of Dexmedomidine (D) and group of Propofol (P). The syringe of drugs will coded by an anesthetist who does not interfere with the patient's sedation and evaluation process; it coded with a three-digit code, and the patients are divided according to the code for the Dexmedomidine or Propofol group. The study is three-sided blind, and the patient, the endoscopic physician, and the person evaluating the symptoms are blind to the type of treatment group, and only a supervisor who prepares the drugs, and divides patients according to the code for each groups will know the type of treatment received by the patient.

Placebo

Not used

Assignment

Parallel

Other design features**Secondary Ids**

empty

Ethics committees**1****Ethics committee****Name of ethics committee**

Ethics committee of Zahedan University of Medical Sciences

Street address

Medical Sciences Campus, Dr. Hesabi Sq.

City

Zahedan

Province

Sistan-va-Balouchestan

Postal code

9816743463

Approval date

2019-02-22, 1397/12/03

Ethics committee reference number

IR.ZAUMS.REC.1397.455

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

Upper gastrointestinal disorders

ICD-10 code

Z13.810

ICD-10 code description

Encounter for screening for upper gastrointestinal disorder

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

Sedation

Timepoint

By monitoring, sedation will be recorded from the start of the drug administration (time 0) and every 5 minutes until the patient transferred to the recovery room.

Method of measurement

Relaxation after taking drugs will asked using Ramsay Relaxation Scale from 0-5 (0-Restless,1-Relax,2-Sleepy,3-Confuse but Responded to Verbal Orders,4-No Response to Verbal orders,5-No Response to painful incitements) and will evaluated by an anesthesiologist.

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: Dexmedetomidine - In D group, Dexmedetomidine doses of 0.5µg/kg bolus and 0.7-0.5µg/Kg/hr infusion will given intravenously to patients.

Category

Treatment - Drugs

2

Description

Intervention group: Propofol - in P group ,Propofol with doses of 0.5mg/kg bolus and 30µg/Kg/min infusion will given intravenously to patients.

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center

Name of recruitment center

Ali ibn Abitalib hospital of Zahedan

Full name of responsible person

Mohammad Kazem Momeni

Street address

Khalij-e-fars highway, Salamat Blvd., Ali Ibn Abitalib hospital

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Web page address

[http://alihos.zaums.ac.ir/#%D8%A8%DB%8C%D9%85%D8%A7%D8%B1%D8%B3%D8%AA%D8%A7%D9%86%20%D8%B9%D9%84%DB%8C%20%D8%A7%D8%A8%D9%86%20%D8%A7%D8%A8%DB%8C%D8%B7%D8%A7%D9%84%D8%A8%20\(%D8%B9\)](http://alihos.zaums.ac.ir/#%D8%A8%DB%8C%D9%85%D8%A7%D8%B1%D8%B3%D8%AA%D8%A7%D9%86%20%D8%B9%D9%84%DB%8C%20%D8%A7%D8%A8%D9%86%20%D8%A7%D8%A8%DB%8C%D8%B7%D8%A7%D9%84%D8%A8%20(%D8%B9))

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Zahedan University of Medical Sciences

Full name of responsible person

Mohsen Taheri

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Medical Sciences Campus, Dr. Hesabi Sq.

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Web page address

<http://research.zaums.ac.ir/#%D9%85%D8%B9%D8%A7%D9%88%D9%86%D8%AA%20%D8%AA%D8%AD%D9%82%D9%8A%D9%82%D8%A7%D8%AA%20%D9%88%20%D9%81%D9%86%D8%A7%D9%88%D8%B1%D9%8A>

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Zahedan University of Medical Sciences

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

Zahedan University of Medical Sciences

Full name of responsible person

Parnia Sayarfar

Position

Resident

Latest degree

Medical doctor

Other areas of specialty/work

Anesthesiology

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Person responsible for scientific inquiries

Contact

Name of organization / entity

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Full name of responsible person

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

Yes - There is 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

Undecided - It is not yet known if there will be 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

Only a portion of the information, such as the original outcome information, will be shared.

When the data will become available and for how long

6 months after printing the results

To whom data/document is available

Data will only be available to researchers working in academic institutions.

Under which criteria data/document could be used

Data should only be used to get ideas in future research.

From where data/document is obtainable

Referring to the university's research deputy

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

After the registering of request in Research deputy and passing the routine office process, documents will be available up to maximum of one week.

Comments

Person responsible for updating data

Contact

Name of organization / entity

Zahedan University of Medical Sciences

Full name of responsible person

Parnia Sayarfar

Position

Resident

Latest degree

Medical doctor

Other areas of specialty/work

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