Clinical Trial Protocol
Iranian Registry of Clinical Trials

16 Sep 2026

Comparison of dexmedetomidine and remifentanil for attenuation of hemodynamic responses to laryngoscopy and orotracheal intubation

Protocol summary

Summary

Aim of this study is comparison effect of Remifentanil and Dexmedetomidine in hemodynamic response in laryngoscopy and orotracheal intubation. This study is clinical trial and double blind in intubation in Valiasr hospital. 124 patients divided randomly four groups(Remifentanil and Dexmedetomidine and Saline and Dexmedetomidine-Remifentanil). Anesthesia induction was performed using propofol 2 mg kg for all patients and then Atracurium 0.4 microgram per kilogram and Midazolam 0.01 milligram per kilogram was injected. We injected 1 micro gram per kilogram Dexmedetomidine in first group and 3 cc of Saline in second group and 1 micro gram per kilogram Remifentanil in third group and 0/5 micro gram per kilogram Dexmedetomidine and Remifentanil in fourth group. Systolic, diastolic blood pressure, heart rate, mean arterial pressure, oxygenation similar measured during before and after tracheal intubation; immediately, 5, 10, 15, minutes after intubation. Inclusion criteria: ASA I and II; without chronic disease; lack of drug abuse; age 15-65; both of gender Exclusion criteria: unwillingness to participate in the study.

General information

Acronym

ASS

IRCT registration information

IRCT registration number: **IRCT2016092722254N1**

Registration date: **2016-11-26, 1395/09/06**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2016-11-26, 1395/09/06

Registrant information

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Name of organization / entity

Arak University of Medical Sciences

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Recruitment status

Recruitment complete

Funding source

Vice chancellor for research, Arak University of Medical Sciences

Expected recruitment start date

2016-06-20, 1395/03/31

Expected recruitment end date

2016-08-20, 1395/05/30

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison of dexmedetomidine and remifentanil for attenuation of hemodynamic responses to laryngoscopy and orotracheal intubation

Public title

Comparison between drugs on hemodynamic changes during tracheal intubation

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: ASA I and II; without chronic disease; lack of drug abuse; age 18-75; both of gender Exclusion

criteria: Unwillingness to participate in the study

Age

From **15 years** old to **65 years** old

Gender

Both

Phase

2

Groups that have been masked

No information

Sample size

Target sample size: **124**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Double blinded

Blinding description

Placebo

Used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee Arak University Of Medical Sciences

Street address

Vice chancellor for research, Payambar Azam Complex, Basij square, Sardasht, Arak

City

Arak

Postal code

848176941

Approval date

2016-04-05, 1395/01/17

Ethics committee reference number

IR.ARAKMU.REC.1394.280

Health conditions studied

1

Description of health condition studied

Intubation

ICD-10 code

Y84.8

ICD-10 code description

other medical peocedures

Primary outcomes

1

Description

mean arterial pressure

Timepoint

before and after inubation

Method of measurement

Blood pressure manometer

2

Description

Oxygenation

Timepoint

before and after inubation

Method of measurement

Pulse Oxymetery

3

Description

heart rate

Timepoint

before and after inubation

Method of measurement

number in minute

Secondary outcomes

empty

Intervention groups

1

Description

We injected 1 micro gram per kilogram Dexmedetomidin in first group

Category

Treatment - Drugs

2

Description

We injected 3 cc of Saline in second group.

Category

Treatment - Drugs

3

Description

We injected 1 micro gram per kilogram Remifentanil in third group.

Category

Treatment - Drugs

4

Description

We inject 0/5 micro gram per kilogram Dexmedetomidin and Remifentanil in fourth group.

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center
Name of recruitment center
Vali-Asr hospital
Full name of responsible person
Dr Hesamaldin Modir
Street address
Vali-Asr hospital, Pirouzi Ave
City
Arak

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Vice chancellor for research, Arak University of Medical Sciences
Full name of responsible person
Dr Mohammad Rafiee
Street address
Vice chancellor for research, Payambar Azam Complex, Basij square, Sardasht, Arak
City
Arak
Grant name
1294
Grant code / Reference number
1294
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Vice chancellor for research, Arak University of Medical Sciences
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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Person responsible for updating data

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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