

Clinical Trial Protocol

Iranian Registry of Clinical Trials

21 Jul 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

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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 Oxymetry

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

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Vali-Asr hospital, Pirouzi Ave

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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

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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

Contact

Name of organization / entity

Arak University of Medical Sciences

Full name of responsible person

Dr Hesamaldin Modir

Position

Anesthesiologist

Other areas of specialty/work**Street address**

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Contact

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Web page address	<i>empty</i>
Sharing plan	Informed Consent Form
	<i>empty</i>
Deidentified Individual Participant Data Set (IPD)	Clinical Study Report
<i>empty</i>	<i>empty</i>
Study Protocol	Analytic Code
<i>empty</i>	<i>empty</i>
Statistical Analysis Plan	Data Dictionary
	<i>empty</i>