

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

Clinical trial Comparison of intravenous dexmedetomidine and intravenous Apotel and combined of those (intravenous Apodex) on postoperative emergence agitation & pain after Adenotonsilectomy with Sevofloran in children

Protocol summary

Summary

(1) Objectives: Evaluation of the effects of intravenous dexmedetomidine and intravenous Apotel and combined of those (intravenous Apodex) on postoperative emergence agitation & pain after adenotonsilectomy in children (2) Design: randomized, double blind controlled with placebo. (3) Setting and conduct: After set up monitoring & fixation of venous catheter & infusion of serum crystalloid, all patients will be received 0.5 mg/kg dexamethazone, 1 µg/kg fentanyl, 0.02 mg/kg atropine as premedication. subsequently induction of anesthesia will be applied with 2 mg/kg propofol & 1 mg/kg succinylcolin, then patients will be intubated. maintenance of anesthesia until to the end of surgery will be continued with combination of 50% oxygen, 50% nitrous oxide, and 2-3% of sevoflurane concentration. (4) Participants including major eligibility criteria. Inclusion criteria: take Informed consent from parents to enter the study; patients between 2-12 old age candidate for :Adenotonsilectomy; Physical status 1 and 2 classification of "American Society of Anesthesiologists" (ASA). Exclusion criteria: History of any cardiac, kidney, hepatic, or neurologic (convulsion) disease; Respiratory disease (Asthma or respiratory allergy); History of allergic reaction to the study drugs; History of upper airway infection in the last 4 weeks; use of any type of sedative drugs at the night before surgery; evidence of severe obstructive sleep apnea (OSA) Sample size: 132 person. (5) Intervention: Patients will be received 15 mg/kg Apotel in 50 ml normal saline in group A, 1 mcg/kg dexmedetomidine in 50 ml normal saline in group D, 10 mg/kg Apotel and 0.3 mcg/kg dexmedetomidine in 50 ml normal saline in group AD, and merely 50 ml normal saline in group S or control group just 15 minutes before termination of surgery during 10 minutes. (6) Main outcome measures: when patient is transferred to

postanesthesia care unit (PACU), emergence agitation (EA) using five score (Col et al) criteria, and pain using 10 score TPPPS criteria will be measured and recorded in advent to the recovery room (T0) and in 5,15,30 minutes thereafter and when the patient discharge from PACU. As well as 6 and 24 hours after discharge from PACU the proportion of EA & pain will be measured and recorded in the ward using aforementioned criteria. patient discharge from PACU will be based on Aldrete 10 score criteria. patient with Aldrete score > 9, and when do not have nausea and vomiting, and with controlled EA & pain will be discharged from PACU, and the time of stay in PACU will be recorded.

General information

Acronym

-

IRCT registration information

IRCT registration number: **IRCT2016092930049N1**
Registration date: **2017-04-12, 1396/01/23**
Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2017-04-12, 1396/01/23

Registrant information

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Name of organization / entity

Kurdistan University of Medical Sciences

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Recruitment status
Recruitment complete

Funding source
Vice chancellor for research of Kurdistan University of Medical Sciences

Expected recruitment start date
2017-04-04, 1396/01/15

Expected recruitment end date
2018-04-04, 1397/01/15

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
Clinical trial Comparison of intravenous dexmedetomidine and intravenous Apotel and combined of those (intravenous Apodex) on postoperative emergence agitation & pain after Adenotonsilectomy with Sevofluran in children

Public title
Effects of intravenous dexmedetomidine and intravenous Apotel and combined of those (intravenous Apodex) on postoperative emergence agitation & pain

Purpose
Prevention

Inclusion/Exclusion criteria
Inclusion criteria: take Informed consent from parents to enter the study; patients between 2-12 old age candidate for Adenotonsilectomy; Physical status 1 and 2 classification of "American Society of Anesthesiologists" (ASA). Exclusion criteria: History of any cardiac, kidney, hepatic, or neurologic (convulsion) disease; Respiratory disease (Asthma or respiratory allergy); History of allergic reaction to the study drugs; History of upper airway infection in the last 4 weeks; use of any type of sedative drugs at the night before surgery; evidence of severe obstructive sleep apnea (OSA)

Age
From **2 years** old to **12 years** old

Gender
Both

Phase
2-3

Groups that have been masked
No information

Sample size
Target sample size: **132**

Randomization (investigator's opinion)
Randomized

Randomization description

Blinding (investigator's opinion)
Double blinded

Blinding description

Placebo

Used
Assignment
Parallel
Other design features
-

Secondary Ids

1
Registry name
-
Secondary trial Id
-
Registration date
empty

Ethics committees

1
Ethics committee
Name of ethics committee
Ethics committee of Kurdistan University of Medical Sciences
Street address
Pasdaran street, Sanandaj
City
Sanandaj
Postal code
Approval date
2016-12-26, 1395/10/06
Ethics committee reference number
IR.MUK.REC.1395.275

Health conditions studied

1
Description of health condition studied
Adenotonsilectomy
ICD-10 code
J35.3
ICD-10 code description
Hypertrophy of tonsils with hypertrophy of adenoids

Primary outcomes

1
Description
Emergence agitation
Timepoint
in advent to the recovery room (T0) and in 5,15,30 minutes thereafter and when the patient discharge from PACU. As well as 6 and 24 hours after discharge from PACU
Method of measurement
five score criteria described by Col for evaluate emergence agitation

2

Description

pain

Timepoint

in advent to the recovery room (T0) and in 5,15,30 minutes thereafter and when the patient discharge from PACU. As well as 6 and 24 hours after discharge from PACU

Method of measurement

modified 10 score TPPPS criteria for evaluate of pain in children

Secondary outcomes

1

Description

Delirium

Timepoint

in advent to the recovery room (T0) and in 5,15,30 minutes thereafter and when the patient discharge from PACU. As well as 6 and 24 hours after discharge from PACU

Method of measurement

20 score PAED criteria for evaluate delirium in children

2

Description

Time to need the first rescue analgesic dose

Timepoint

Period of time from PACU admittance until the first need to analgesics

Method of measurement

By recording period of time between PACU admittance to the first need to analgesics

3

Description

Rate of need to analgesics

Timepoint

amount of analgesics usage for pain & EA relief

Method of measurement

By recording of amounts of analgesic usage in PACU & ward

4

Description

Nausea & vomiting

Timepoint

consideration for beeing Nausea & vomiting

Method of measurement

Have or not have

5

Description

Time of stay in PACU

Timepoint

Period of time from admittance to discharge from PACU

Method of measurement

recording period of time from admittance to discharge from PACU based on Aldrete criteria > 9

Intervention groups

1

Description

in group A 15 mg/kg of intravenous acetaminophen in 50 ml normal saline, will be infused 15 minutes before termination of surgery during 10 minutes.

Category

Treatment - Drugs

2

Description

in group D 1 mcg/kg of intravenous dexmedetomidine in 50 ml normal saline, will be infused 15 minutes before termination of surgery during 10 minutes.

Category

Treatment - Drugs

3

Description

in group AD 10 mg/kg of intravenous acetaminophen and 0.3 mcg/kg dexmdetomidine in 50 ml normal saline, will be infused 15 minutes before termination of surgery during 10 minutes.

Category

Treatment - Drugs

4

Description

in group S or control group merely 50 ml normal saline, will be infused 15 minutes before termination of surgery during 10 minutes.

Category

Placebo

Recruitment centers

1

Recruitment center

Name of recruitment center

Kosar Hospital of Sanandaj

Full name of responsible person

Dr.Farzad Sarshivi

Street address

Kosar hospital, Kurdistan University of Medical Sciences, Pasdaran street, Sanandaj

City

Sanandaj

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice chancellor for research of Kurdistan University of Medical Sciences

Full name of responsible person

Dr.Ebrahim Ghaderi

Street address

Kurdistan University of Medical Sciences, Pasdaran street, Sanandaj

City

Sanandaj

Grant name**Grant code / Reference number****Is the source of funding the same sponsor organization/entity?**

Yes

Title of funding source

Vice chancellor for research of Kurdistan 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**

Kurdistan University of Medical Sciences

Full name of responsible person

Dr.Farzad Sarshivi

Position

Anesthesiologist

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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