Clinical Trial Protocol
Iranian Registry of Clinical Trials

16 Sep 2026

Comparison the effects of intravenous hydrocortisone and dexamethasone before extubation on Laryngospasm, cough and stridor after general anesthesia

Protocol summary

Summary

The aim of this study was to compare the effects of hydrocortisone and dexamethasone prior to extubation laryngospasm, coughing and stridor after general anesthesia. This is Clinical Trial, double-blind study with 108 patients, aged 15-55 years in hospital operating rooms of 15 Khordad in Bidokht and Hasheminejad in Mashhad. Patients class 1 and 2 ASA undergoing elective surgery (orthopedics, general surgery and urology) under anesthesia intwo groups, Dexamethasone and hydrocortisone with intubation. Procedure to induce anesthesia in both fixed as premedication with midazolam 1-2mg, fentanyl 1-2 mcg / kg and induction of anesthesia with thiopental 5 mg / kg, neuromuscular./5 mg / kg. The endotracheal tube cuff pressure to the extent that is not commensurate with the size and sex of patients Leakage will be selected. Group 1 and group 2 hydrocortisone100 mg and dexamethasone 8 mg An intravenous dose 30 minutes before extubation receive back after swallowing reflex of the patient extubation laryngospasm, cough, stridor and the results of the questionnaire survey reflected.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2015032520838N1**
Registration date: **2015-03-25, 1394/01/05**
Registration timing: **registered_while_recruiting**

Last update:
Update count: **0**

Registration date

2015-03-25, 1394/01/05

Registrant information

Name

Massoume Heidary karizaki

Name of organization / entity

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Recruitment status

Recruitment complete

Funding source

Research Deputy of Gonabad University of Medical Sciences

Expected recruitment start date

2015-01-30, 1393/11/10

Expected recruitment end date

2015-08-22, 1394/05/31

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparison the effects of intravenous hydrocortisone and dexamethasone before extubation on Laryngospasm, cough and stridor after general anesthesia

Public title

Comparison the effects of intravenous hydrocortisone and dexamethasone before extubation on Laryngospasm, cough and stridor after general anesthesia

Purpose

Prevention

Inclusion/Exclusion criteria

Inclusion criteria: patients candidate for elective orthopedic surgery; general surgery and urology under general anesthesia with tracheal intubation ASA1,2 class in the age group 15- 55 years; Surgery less than 2 hours. Exclusion criteria: Larynx surgery;Respiratory disease; Difficult intubation; Require prolonged endotracheal intubation; Drug abuse.

Age

From **15 years** old to **55 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **108**

Randomization (investigator's opinion)

N/A

Randomization description

Blinding (investigator's opinion)

Double blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Gonabad University of Medical Sciences

Street address

Next to the Asian road, Gonabad, Gonabad University of Medical Sciences

City

Gonabad

Postal code

Approval date

2015-01-07, 1393/10/17

Ethics committee reference number

GMU.REC.1393.95

Health conditions studied

1

Description of health condition studied

Stridor

ICD-10 code

j38.4

ICD-10 code description

Oedema of larynx

2

Description of health condition studied

Laryngospasm - Cough

ICD-10 code

J95.8

ICD-10 code description

Post procedural respiratory disorders

Primary outcomes

1

Description

Laryngospasm

Timepoint

Afte extubation

Method of measurement

Clinical signs and score table laryngospasm

2

Description

Cough

Timepoint

After extubation

Method of measurement

Clinical signs on the score sheet cough

3

Description

Stridor

Timepoint

After extubation

Method of measurement

Clinical signs and stridor score table

Secondary outcomes

empty

Intervention groups

1

Description

Group 1: Hydrocortisone 100 mg IV 30 minutes before to extubation

Category

Treatment - Drugs

2

Description

Group 2: Dexamethasone 100 mg IV 30 minutes before to extubation

Category

Treatment - Drugs

Recruitment centers

1

Recruitment center
Name of recruitment center
15 Khordad Hospital, Bidokht, Gonabad and Shahid Hasheminejad Hospital Mashhad
Full name of responsible person
Massoume Heidary Karizaki
Street address
Shahid Hasheminejad Hospital, Mashhad
City
Mashhad

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Gonabad University of Medical Sciences
Full name of responsible person
Dr. Ali Mohammadpour
Street address
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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
Gonabad 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
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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