Clinical Trial Protocol
Iranian Registry of Clinical Trials

18 Sep 2026

comparison between the effect of using of trapezius squeezing test with jaw thrust maneuver on the incidence of successful attempts for LMA insertion.

Protocol summary

Summary

The aim of this study was to compare trapezius squeezing test versus jaw thrust as clinical indicators for appropriate condition for insertion of laryngeal mask airway. This triple blind randomized clinical trial study was done on 138 patients aged 20 to 70 years old undergoing minor surgeries, randomly allocated in T (trapezius squeezing test=69) or J (jaw thrust=69) group in Emam Reza hospital of Birjand university of medical sciences. The LMA was inserted after the loss of motional response to trapezius squeezing or jaw thrust. Heart rate and blood pressure was measured after induction of anesthesia as a base line. The variability more than 20% in blood pressure or heart rate 1 min after LMA insertion to the base line or the occurrence of coughing, gagging, gross purposeful movements, breath-holding, laryngospasm, or an SpO2 < 90% during LMA insertion were considered as an unsuccessful attempt. The incidence of successful attempt, insertion time were compared between two groups. Key points: Jaw thrust; Laryngeal mask airway; Trapezius squeezing test

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2017070421383N7**
Registration date: **2017-09-26, 1396/07/04**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date

2017-09-26, 1396/07/04

Registrant information

Name

Amir Saber Tanha

Name of organization / entity

Birjand University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 56 3243 2778

Email address

dr.saber@bums.ac.ir

Recruitment status

Recruitment complete

Funding source

Birjand University of Medical Sciences

Expected recruitment start date

2017-05-05, 1396/02/15

Expected recruitment end date

2017-08-06, 1396/05/15

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

comparison between the effect of using of trapezius squeezing test with jaw thrust maneuver on the incidence of successful attempts for LMA insertion.

Public title

comparing the effect of trapezius squeezing test versus jaw thrust maneuver on the incidence of successful attempts for LMA insertion.

Purpose

Other

Inclusion/Exclusion criteria

Inclusion criteria: All the patients aged 18 to 70 years old with American Society of Anesthesia physical status

classification (ASA) 1 to 2 who were scheduled for elective surgeries. Exclusion criteria: Emergent surgeries; The patients with history of hypertension, dysautonomia, difficult intubation, neuropathy or plegia: symptoms of difficult intubation; addicted patients; substance abuse.

Age
From **18 years** old to **70 years** old

Gender
Both

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **138**

Randomization (investigator's opinion)
Randomized

Randomization description

Blinding (investigator's opinion)
Triple blinded

Blinding description

Placebo
Not used

Assignment
Parallel

Other design features
The motor response recorded by an independent researcher who was not in the operating room while the test was performed. Also, the patients and the statistical researcher were uninformed about the study groups. For randomization we wrote numbers from 1 to 138 on separate papers and put it in envelops. Envelops were put in a box. At entrance to the operating room each patient picked up one envelope randomly from the box and gave it to the investigator who was responsible for doing maneuver. Squeezing the trapezius muscle for odd numbers and jaw thrust for even numbers was performed.

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Ethics Committee of Birjand University of Medical Sciences

Street address
Birjand University of Medical Sciences, Ghafari Street, Birjand, Iran.

City
Birjand

Postal code

Approval date
2017-04-24, 1396/02/04

Ethics committee reference number
ir.bums.rec.1396.24

Health conditions studied

1

Description of health condition studied
general anesthesia

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description
successful attempt

Timepoint
After laryngeal mask insertion

Method of measurement
observation

2

Description
insertion time

Timepoint
immediately after no response to maneuovers

Method of measurement
hour

Secondary outcomes

empty

Intervention groups

1

Description
trapezius sqeezing test

Category
Other

2

Description
jaw thrust

Category
Other

Recruitment centers

1

Recruitment center

Name of recruitment center
Imam Reza hospital of Birjand University of Medical Sciences.

Full name of responsible person
Dr. Amir Saber Tanha

Street address

City
Birjand

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Vice chancellor for research, Birjand University of Medical Sciences
Full name of responsible person
Dr. tooba kazemi
Street address
Vice Chancellor for research, Birjand University of Medical Sciences, Ghafari Street, Birjand, Iran
City
Birjand
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, Birjand 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
Birjand University of Medical Sciences
Full name of responsible person
Dr. Amir Saber Tanha
Position
Assisstant Professor of Anesthesia
Other areas of specialty/work
Street address
Birjand University of Medical Sciences, Ghafari Street, Birjand.
City
Birjand
Postal code
Phone
+98 56 3243 2778
Fax
Email
amirsaber63@gmail.com
Web page address

Person responsible for scientific inquiries

Contact
Name of organization / entity
Birjand University of Medical Sciences
Full name of responsible person
Dr. Amir Saber Tanha
Position
Assistant professor of anesthesia
Other areas of specialty/work
Street address
Birjand University of Medical Sciences, Ghafari Street, Birjand
City
Birjand
Postal code
Phone
+98 56 3243 2778
Fax
Email
amirsaber63@gmail.com
Web page address

Person responsible for updating data

Contact
Name of organization / entity
Birjand University of Medical Sciences
Full name of responsible person
Dr. Amir Saber Tanha
Position
Assistant professor of anesthesia
Other areas of specialty/work
Street address
Birjand University of Medical Sciences, Ghafari Street, Birjand
City
Birjand
Postal code
Phone
+98 56 3243 2778
Fax
Email
amirsaber63@gmail.com
Web page address

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