Clinical Trial Protocol
Iranian Registry of Clinical Trials

16 Sep 2026

Comparative evaluation direct laryngoscopy versus Glidescope for the purpose of laryngoscopy management and intubation in candidates of caesarean delivery with general anesthesia

Protocol summary

Study aim

Determining and comparing the direct laryngoscopy versus Glidescope for the purpose of laryngoscopy management and intubation in candidates of caesarean delivery with general anesthesia

Design

A randomized, double-blinding clinical trial, with the parallel groups, Phase 2 on 90 patients

Settings and conduct

In this randomized double-blind clinical trial, 90 eligible patients referred to Beheshti Hospital in Isfahan will be included in the study and randomly divided into two groups. The first group will undergo direct intubation and the second group will be intubated by GlideScope video. Then, hemodynamic parameters of patients, laryngoscopy time, and the number of attempts for intubation between the two groups will be compared.

Participants/Inclusion and exclusion criteria

Inclusion criteria consisted of pregnant women that were candidates for cesarean section under general anesthesia, with the American Society of Anesthesiologists (ASA) score of one or two, the gravidity of one or two, and Intubation Difficulty Scale (IDS) score of equal or less than 5. exclusion criteria consisted of the thyromental distance (TMD) was less than 6 cm, the neck circumference (NC) was equal or more than 43 cm, patients with increased intracranial pressure, any airway pathology, cervical spinal cord injury, and requirement for rapid induction.

Intervention groups

The first intervention group: Patients in the first group underwent intubation using the direct Macintosh laryngoscope with Macintosh blade No. 3. The second intervention group: Patients in the second group underwent intubation using GlideScope video laryngoscope.

Main outcome variables

Hemodynamic parameters; Laryngoscopy time; Number of attempts for intubation

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20200825048515N44**
Registration date: **2021-10-06, 1400/07/14**
Registration timing: **retrospective**

Last update: **2021-10-06, 1400/07/14**
Update count: **0**

Registration date

2021-10-06, 1400/07/14

Registrant information

Name

Asieh Maghami Mehr

Name of organization / entity

Country

Iran (Islamic Republic of)

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+98 31 0000 0000

Email address

asimaghami@yahoo.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2021-04-21, 1400/02/01

Expected recruitment end date

2021-08-22, 1400/05/31

Actual recruitment start date

2021-04-21, 1400/02/01

Actual recruitment end date

2021-08-22, 1400/05/31

Trial completion date

2021-08-22, 1400/05/31

Scientific title

Comparative evaluation direct laryngoscopy versus Glidescope for the purpose of laryngoscopy management and intubation in candidates of caesarean delivery with general anesthesia

Public title

Comparison of direct laryngoscopy versus Glidescope for the purpose of laryngoscopy management and intubation in candidates of caesarean delivery

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

Pregnant women that were candidates for cesarean section under general anesthesia Class I and II classification of the American Society of Anesthesiologists The gravidity of one or two Intubation Difficulty Scale (IDS) score of equal or less than 5

Exclusion criteria:

The thyromental distance (TMD) was less than 6 cm The neck circumference (NC) was equal or more than 43 cm Patients with an increased intracranial pressure Any airway pathology Any cervical spinal cord injury requirement for rapid induction

Age

No age limit

Gender

Female

Phase

N/A

Groups that have been masked

- Participant
- Outcome assessor
- Data analyser

Sample size

Target sample size: **90**

Actual sample size reached: **90**

Randomization (investigator's opinion)

Randomized

Randomization description

In this study, 90 eligible patients will be randomly selected. Then random numbers are created by computer software "Random Allocation". These numbers are randomly divided into two groups A (first intervention) and B (second intervention). Each number is written on paper and placed in an envelope. Then each patient is asked to choose an envelope from among the envelopes. According to the selected envelope, the patient will be assigned to one of the two groups.

Blinding (investigator's opinion)

Double blinded

Blinding description

To meet the blinding condition in the study, the anesthesiologist that was responsible for performing intubation did not take part in the collection of patients' information due to knowledge of the type of intervention in each of the two groups; however, the patient, the patient data collector, and the statistician were not aware of the type of intervention in two groups.

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of Isfahan University of Medical Sciences

Street address

Street address Isfahan University of Medical Sciences, Hezar Jarib Ave., Azadi Sq

City

Isfahan

Province

Isfehan

Postal code

8179964167

Approval date

2019-03-02, 1397/12/11

Ethics committee reference number

IR.MUI.MED.REC.1397.282

Health conditions studied

1

Description of health condition studied

Elective cesarean section

ICD-10 code

O82.0

ICD-10 code description

Delivery by elective caesarean section

Primary outcomes

1

Description

Number of attempts for intubatio

Timepoint

At the time of intubation

Method of measurement

Number of attempts

2

Description

Time-to-intubation

Timepoint

At the time of intubation

Method of measurement

from the time the laryngoscope was inserted into the mouth to the filling of the endotracheal tube cuff and the confirmation of the insertion of the intubation with capnography

Secondary outcomes

1

Description

Systolic blood pressure

Timepoint

At the beginning of the study (baseline) and before laryngoscopy and in the first, third, fifth, and tenth minutes after laryngoscopy

Method of measurement

Monitoring device

2

Description

Diastolic blood pressure

Timepoint

At the beginning of the study (baseline) and before laryngoscopy and in the first, third, fifth, and tenth minutes after laryngoscopy

Method of measurement

Monitoring device

3

Description

Mean Arterial Pressure

Timepoint

At the beginning of the study (baseline) and before laryngoscopy and in the first, third, fifth, and tenth minutes after laryngoscopy

Method of measurement

Monitoring device

4

Description

Heart rate

Timepoint

At the beginning of the study (baseline) and before laryngoscopy and in the first, third, fifth, and tenth minutes after laryngoscopy

Method of measurement

Monitoring device

Intervention groups

1

Description

The first intervention group: Patients in the first group underwent intubation using the direct Macintosh laryngoscope with Macintosh blade No. 3.

Category

Treatment - Devices

2

Description

The second intervention group: Patients in the second group underwent intubation using GlideScope video laryngoscope.

Category

Treatment - Devices

Recruitment centers

1

Recruitment center

Name of recruitment center

Shahid Beheshti Hospital

Full name of responsible person

Azim Honarmand

Street address

Motahari Street.

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Esfahan University of Medical Sciences

Full name of responsible person

Shaghayegh Haghjooy Javanmard

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Vice Chancellor for Research, School of Medicine, Hezar Jarib Street, Isfahan.

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Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?

No

Title of funding source

Isfahan University of Medical Sciences

Proportion provided by this source
100
Public or private sector
Public
Domestic or foreign origin
Domestic
Category of foreign source of funding
empty
Country of origin
Type of organization providing the funding
Academic

Person responsible for general inquiries

Contact
Name of organization / entity
Esfahan University of Medical Sciences
Full name of responsible person
Azim Honarmand
Position
Professor
Latest degree
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Person responsible for updating data

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
No - There is not a plan to make this available
Justification/reason for indecision/not sharing IPD
y. If you do not not want to provide more explanation please enter "There is no further information
Study Protocol
No - There is not a plan to make this available
Statistical Analysis Plan
No - There is not a plan to make this available
Informed Consent Form
No - There is not a plan to make this available
Clinical Study Report
No - There is not a plan to make this available
Analytic Code
No - There is not a plan to make this available
Data Dictionary
No - There is not a plan to make this available