

Inclusion And Exclusion Criteria

Record ID

Date of enrollment

Inclusion criteria

Age \leq 16 years

- Yes
 No

Planned for tracheal intubation

- Yes
 No

Exclusion criteria

Age $>$ 16 years

- Yes
 No

Already intubated

- Yes
 No

It appears that all the inclusion criteria are met and none of the exclusion criteria are met, therefore the patient is INCLUDED in the study

Consent form

Consent form obtained

- Yes
 No
 Not applicable (consent waived)

Date of Informed Consent

Patient Data And History

Patient data and history

Child age at the day of anaesthesia

If age is < 1 month, enter days only;

If age is < 1 year, enter months only;

If age is ≥ 1 year, enter years only;

Days

Months

Years

Child weight at the day of anaesthesia

_____ (kg)

Child height at the day of anaesthesia

_____ (cm)

Gestational age at birth

_____ (weeks)

Birth weight

_____ (kg)

Sex

- Male
 Female
 Undefined

History of previous intubation

- No
 Yes
 Information not available

History of previous difficult intubation

- No
 Yes
 Unknown

Has the child any known congenital abnormality/syndrome?

- Yes _____
 No

If yes, tick all that apply.

Has the child any cranio-facial abnormality?

- Yes _____
- No _____

If yes, tick all that apply.

Current Condition The Day Of The Intubation

Current condition (on the day of the intubation)

Recent Upper Respiratory Tract Infection (< 2 weeks)

- Yes
 No

History of laryngitis/croup (last 2 weeks)

- Yes
 No

History of asthma or bronchiolitis (last 12 months)

- Yes
 No

Gastro-esophageal reflux

- Yes
 No

Treated with proton pump inhibitor

- Yes
 No

Known lung pathology (other than asthma) or cardiac pathology

- Yes _____
 No

If yes, tick all that apply.

Degree of surgical planning

- Scheduled
 Unscheduled (urgency, emergency)

ASA

- I (healthy patient)
 II (mild systemic disease)
 III (severe systemic disease)
 IV (life threatening condition)
 V (not expected to survive, if not surgery)

Pediatric Risk Assessment (PRAm)

- Urgent
 Comorbidity
 Critically ill (preop. cardio-respiratory support)
 Age < 12 months
 Neoplasm

PRAm total score

Location of intubation by anaesthesia team

- Operating room
 Intervention room outside the operating room
 Cardiac cath lab
 PICU/NICU
 Emergency department/ward
 Radiology department
 Other, specify: _____

Specialty of the procedure

- General surgery (abdominal, visceral)
- ENT
- Cardiac surgery
- Interventional cardiology
- Thoracic surgery
- Neurosurgery
- Plastic surgery
- Craniofacial
- Ophthalmology
- Orthopaedics
- Urology
- Neuroradiology/general radiology
- Other, specify: _____

Data Collection

Date and time of anaesthesia (induction)

Is today's tracheal intubation an anticipated difficult intubation

- Yes
 No

Anaesthesia induction

- Inhalational
 Intravenous

Tick all that apply.

Inhalational

- Sevoflurane
 N2O
 Other

Intravenous

- Propofol
 Midazolam
 Ketamine
 Thiopentone
 Dexmedetomidine
 Other, specify: _____

Opioids at induction

- Yes
 No

- Fentanyl
 Remifentanyl
 Sufentanyl
 Morphine
 Alfentanyl
 Other, specify: _____

Neuromuscular blocking agent (NMBA) used for intubation

- Yes
 No

If yes, specify which NMBA.

Specify

- Succinylcholine
 Cisatracurium
 Atracurium
 Rocuronium
 Vecuronium
 Other

Timing of NMBA

- Before 1st attempt
 Between 1st and 2nd attempt
 After 2nd attempt

Plan for intubation

- Standard anaesthesia induction with bag-mask ventilation
 Intubation of spontaneously breathing patient
 Modified rapid sequence intubation (includes bag-mask ventilation)
 Rapid sequence intubation (no bag-mask ventilation)

Type of anaesthesia

- Inhalational
- Total IntraVenous Anaesthesia (TIVA)

Intubation Attempt(s)

Since a successful attempt has already been recorded, it is not possible to fill out this form again.

Please, click "-- Cancel --".

FIRST INTUBATION ATTEMPT

SECOND INTUBATION ATTEMPT

THIRD INTUBATION ATTEMPT

FINAL INTUBATION ATTEMPT

Degree of operator's experience performing 1st attempt

- Consultant with \geq 5-year experience in pediatric anesthesia
 Consultant with $<$ 5-year experience in pediatric anesthesia
 Trainee/registrar
 Nurse practitioner
 Medical student

Primary speciality of the person performing the intubation

- Anesthesia
 Intensive Care
 Neonatology
 Emergency Medicine
 ENT
 Other, specify: _____

Was the patient ventilated between this ventilation attempt and the previous one?

- Yes
 No

Change of intubation route

- Yes
 No

Technique of choice

- Oral intubation
 Nasal intubation

Position during intubation

- Supine
 Ramping
 Lateral
 Other, specify: _____

Change of type of tracheal tube?

- Yes
 No

Type of tracheal tube

- Cuffed
 Uncuffed
 Double lumen tube

Size

Size

 Size

 Pre-oxygenation (FiO₂ ≥ 80% for at least 1 min prior to intubation)

- Yes
 No

 Supplemental oxygen administered during intubation attempt?

- Yes
 No

 How was O₂ given?

- Nasal cannula
 Via nasopharyngeal tube
 Via tracheal tube
 Other, specify: _____

 Flow of O₂ given

(L/min)

 Intubation technique / device used.

Tick more than 1, if combined technique used.

- Direct laryngoscopy with standard blade
 Direct laryngoscopy with hyper-angulated blade
 Video-laryngoscopy with standard blade
 Video-laryngoscopy with hyper-angulated blade
 Channeled video laryngoscope
 Flexible optical bronchoscope
 Rigid scope
 Other, specify: _____

 Cormack-Lehane score

- 1 (full view of the glottis)
 2a (partial view of glottis)
 2b (only arytenoid cartilages visualized)
 3 (only epiglottis visualized, none of the glottis seen)
 4 (neither glottis of epiglottis seen)

 POGO-Score

(Percentage of glottic opening for laryngeal grading. The POGO score represents the linear span from anterior commissure to inter-arytenoid notch)

- 76-100 (full view of the glottis)
 51-75 (partial view of glottis)
 26-50 (only half of vocal cord and arytenoid visible)
 1-25 (only lower fourth of vocal cord and arytenoid visible)
 0 (no glottic structure visible)

 Preventive additional equipment

- Yes
 No

 Type of additional equipment
 Tick all that apply.

- Stylet (device in the tube, reinforcing it)
 Intubation catheter (longer device to railroad the tube into the trachea)
 Cricoid pressure
 McGill nipper
 Other, specify: _____

 Intubation successful

- Yes
 No

Reason for failure/abandoning attempt
Tick all that apply.

- Insufficient view
- Drop in oxygenation
- Failure to advance tube
- Need for extra device
- Need to change technique
- Need for help from senior staff or colleague
- Other, describe: _____

Overall Number Of Attempts Until Successful Intubation

Was a successful intubation achieved?

- Yes
 No

Decision not to intubate

- Yes
 No

Add a comment

Number of attempts until successful intubation

(number of attempts)

Time from induction of anaesthesia ([induction_date])
until successful intubation achieved or decision not
to intubate

(mins)

First measured etCO₂

(mmHg)

First measured etCO₂

(kPa)

It is possible to enter only one etCO₂ value, not both,
Please keep only one value with unit of choice.

Value of etCO₂ in kPa unit

Extubation Details

Since a successful intubation has not been achieved, it is not possible to fill out this form.

Please, click "-- Cancel --".

Reversion of neuromuscular blocking agent (NMBA)
If yes, specify which.

- No
- Yes
- Not applicable (no NMBA used)

Specify

- Neostigmine
- Sugammadex

Monitoring of neuromuscular paralysis degree prior to
extubation

- No
- Yes
- Not applicable (no NMBA used)

Technique of extubation

- Deep
- Awake
- Not extubated - transferred intubated to ICU,
PACU, etc.

Critical Event(s)

Critical Event(s)

Did any critical event correlated to the use of a tracheal tube, either at intubation, extubation or both, occur?

- Yes
 No

When did the critical event(s) occur?
 Tick all that apply.

- Intubation
 Maintenance of anaesthesia
 Extubation
 PACU/Recovery Room

What kind(s) of critical event(s) occurred?
 Tick all that apply (refer to definition of critical events)

- Severe hypoxemia (SpO₂ < 85%, for at least 1 minute)
 Severe bradycardia (for at least 1 minute)
 Cardiac arrest leading to cardiopulmonary resuscitation
 Esophageal intubation not immediately recognized (accompanied by desaturation and/or bradycardia)
 Unintended bronchial intubation (accompanied by desaturation and/or bradycardia)
 Accidental tracheal tube dislocation (after successful tracheal intubation)
 Laryngospasm with need for treatment
 Bronchospasm with need for treatment
 Obstruction of the tracheal tube requiring lavage and/or tracheal tube exchange
 Acute airway bleeding/ epistaxis
 Stridor after extubation
 Pneumothorax/pneumomediastinum
 Pulmonary aspiration of gastric content
 Negative pressure pulmonary edema
 Can't intubate, can't oxygenate (CICO) situation
 Death correlated to failed airway management
 Other severe complication(s), describe: _____
 (DEFINITION OF "CRITICAL EVENTS" IN THIS STUDY AND TIME FRAME: any episode of occurrence during tracheal intubation requiring a medical intervention from the start of anaesthesia until the end of anaesthesia (defined as handover to either the postanaesthesia care unit, the paediatric or neonatal intensive care unit, the ward or discharge home straight from anaesthesia care))

Treatment/ intervention undertaken in response to the critical event

Tick all that apply.

Treatment/ intervention undertaken in response to the critical event
 Tick all that apply.

- Intervention _____
 Pharmacological treatment _____
 Front of Neck Access (FONA) - if undertaken, please briefly describe _____
 Other describe: _____

Please briefly describe FONA technique:

24-hour/at discharge Follow Up

Since no critical event correlated to the use of a tracheal tube, either at intubation, extubation or both has occurred, it is not possible to fill out this form.

Please, click "-- Cancel --".

24-HOUR (or at discharge, if discharged before 24 hours) FOLLOW UP

(if critical event(s) occurred)

Follow up at 24 hours/at discharge completed for critical events

- Yes
 No

Any sequelae (additional follow-up required) due to the critical event(s)?

- Yes
 No, patient fully recovered

Additional treatment/ action

- Delayed hospital discharge due to the critical event
 Still intubated due to the critical event
 Need for re-intubation after extubation within the first 24 hours
 Still under low flow O2 or HFNO
 Other, specify: _____

Note:

If follow-up at 24 h, or at discharge, is performed and the child fully recovered, END CRF HERE.

If child had any consequence after complication, follow up until hospital discharge or up to 30 days.

Final Follow Up

Since no critical event correlated to the use of a tracheal tube, either at intubation, extubation or both has occurred, it is not possible to fill out this form.

Please, click "-- Cancel --".

Follow-up until hospital discharge or up to 30 days (fill in if critical event(s) occurred and consequences occurred)

Follow-up completed?

- Yes
 No

Date of final follow up

Patient status at final follow-up

Tick single most appropriate.

- Discharged to home / Adverse event fully reversed
 Still in hospital or transferred to another hospital
 Need for further follow-up
 Death
 Other, describe _____

Date of discharge (or death):

Suspected cause of death

Additional comments:
