

**AIrway MaNagement PrActices and Complications of InTubation in Indian ICUs (IMPACT)  
CLINICAL REPORT FORM**

**Screening**

**Inclusion criteria**

Is patient's age equal or higher than 18 years?

- YES
- NO

Is the patient critically ill?

(i.e. with a life-threatening condition requiring endotracheal intubation for cardio-respiratory failure and/or airway protection)

- YES
- NO

Was the patient intubated in hospital?

- YES
- NO

**Exclusion criteria**

Was the patient intubated ONLY for receiving general anesthesia?  
(e.g. general anesthesia for scheduled major surgery)

- YES
- NO

Was intubation performed for cardiac arrest?

- YES
- NO

If all the criteria were met, is the patient finally enrolled in the study?

- YES
- NO

If NO, reasons for not enrolment:

- Local investigator not present during the event
- Treating physician's decision
- Lack of any form of required informed consent
- Other, specify \_\_\_\_\_

**Center no.:**.....

**Patient's ID number:** \_\_\_\_\_

Age: \_\_\_\_\_ Sex: M  F

Height: \_\_\_\_\_ cm Weight: \_\_\_\_\_ Kg BMI \_\_\_\_\_

Date of hospital admission: \_\_\_\_\_ (DD/MM/YY)

Source of ICU admission: Ward / ED/ Other ICU / Other hospital

Diagnosis:.....

Reason for ICU admission: .....

ICU admission diagnosis: .....

**Reason for Intubation**

- Emergent/ Elective
- Respiratory failure
- Airway obstruction
- Cardiovascular instability
- Neurological impairment
- Other \_\_\_\_\_, Please specify

**Date of intubation:** \_\_\_\_\_ (DD)/ \_\_\_\_\_ (MM)/ \_\_\_\_\_ (YY)

**Time of intubation:** \_\_\_\_\_ AM / PM

**APACHE II score** at the time of Intubation:

**SOFA score** at the time of Intubation:

**Anticipated ("anatomical") difficult airway management?**

- YES
- NO
- Evaluation not performed

If evaluation performed: Method used

**Malampatti Score**

**LEMON**

**MACOCHA score**

Other, please specify, \_\_\_\_\_

**Vital signs 30 mins before intubation (as Baseline)**

GCS:

HR: SBP DBP MAP SpO<sub>2</sub>

**Already on vasopressors?** Yes / No

If yes Drug Dose

**Fluid load administered** in the last 30 minutes before intubation? Yes / No

If yes, specify bolus volume \_\_\_\_\_ml

**Ongoing respiratory support:** Yes / No, If yes please specify Nasal Cannula / Oxygen mask/ NRBM/ High flow nasal cannula (HFNC)/ Continuous positive airway pressure (CPAP) /Noninvasive positive pressure ventilation (NPPV)

Sr. Potassium .....\_mEq/L – mmol/L

**Laryngoscopy and intubation practices**

**Preoxygenation methods:** O<sub>2</sub> Mask / CPAP / NIV /HFNC / Ambu bag and Mask

**Patient position during preoxygenation:** Supine / Ramp

Specify SpO<sub>2</sub> at the end of preoxygenation: \_\_\_\_\_%

**Oxygen administration during laryngoscopy/fiberscope (apneic oxygenation)?** Yes /No

**Method of intubation:** Regular intubation /Rapid Sequence Intubation / Delayed Sequence Intubation

**Drugs used:** Midazolam / Lorazepam / Fentanyl / Morphine / Thiopentone/Propofol / Etomidate / Ketamine: Succinylcholine/\_Rocuronium / Vecuronium/ Atracurium / Cisatracurium

**Cricoid pressure applied?** Yes / No

**Method for first laryngoscopy:** Direct laryngoscopy with Macintosh blade / Direct laryngoscopy with Miller blade / Videolaryngoscopy - Macintosh – type blade / Hyperangulated blade

**Did you need any external laryngeal manipulation?** Yes / No, If yes: BURP / ELP

**Airway adjunct used?** Yes / No, If yes: Bougie / Stylet / Other, specify \_\_\_\_\_

**Total number of laryngoscopy attempts:** 1 /2 /3 /4

**Route of intubation:** Orotracheal /Nasotracheal

**Was Preoxygenation given between laryngoscopic attempts?** Yes / No

**How did you confirm endotracheal placement of the ETT?** Tick all that apply  
5 point Auscultation / Waveform capnography / Capnometry / USG / X-ray Chest

**Vitals at the time of intubation**

HR: SBP DBP MAP SpO<sub>2</sub>

**Vitals immediately after intubation** (every 5 mins for 30 mins)

HR: SBP DBP MAP SpO<sub>2</sub>

**Did any complications occur during intubation?** Yes / No

If Yes, please specify: Hypoxia/ Hypotension/ Arrhythmias/ Cardiac Arrest / Aspiration

**If intubation failed, how did you secure the airway?**

- Supraglottic airway insertion
- Cricothyroidotomy
- Percutaneous tracheostomy
- Surgical tracheostomy
- Cannot intubate cannot oxygenate scenario
- Other \_\_\_\_\_

**Operator's training**

**Specify total number of operators involved in the procedure and qualified to perform of intubation 1/2/3/4**

**Operator performing the 1st attempt**

- Medical student
- Resident

- Fellow
- Staff physician/consultant
- Other \_\_\_\_\_

**Specify the field of training of the operator performing the 1st attempt:**

- Anesthesia and Intensive Care
- Critical Care/Intensive Care
- Emergency Medicine
- Internal Medicine
- Pulmonary Medicine
- Pulmonary and Critical Care Medicine
- Surgery
- Other \_\_\_\_\_

**No. of intubation(s)/week of the operator performing the 1st attempt:**

- $\leq 1$  intubation/week
- 2 -5 intubations/week
- 6 – 10 intubations/week
- 11 – 20 intubations/week
- $> 20$  intubations/week

**Is the operator performing the successful attempt the same as the operator performing the 1st attempt?**

- YES  NO

**Operator performing the successful attempt:**

- Medical student
- Resident
- Fellow
- Staff physician/consultant
- Other \_\_\_\_\_

**Specify the field of training of the operator performing the successful attempt:**

- Anesthesia and Intensive Care
- Critical Care/Intensive Care
- Emergency Medicine
- Internal Medicine
- Pulmonary Medicine
- Pulmonary and Critical Care Medicine
- Surgery
- Other \_\_\_\_\_

**No. of intubation(s)/week of the operator performing the successful attempt:**

- $\leq 1$  intubation/week
- 2 -5 intubations/week
- 6 – 10 intubations/week
- 11 – 20 intubations/week
- $> 20$  intubations/week

**OUTCOME OF INTUBATION**

Lowest systolic blood pressure after intubation (within 60 minutes from the procedure) available?

YES  NO

If Yes \_\_\_\_\_ mmHg

Systolic blood pressure < 90 mmHg was present for more than 60 minutes?

YES  NO

Lowest diastolic blood pressure after intubation (within 60 minutes from the procedure) available?

YES  NO

If Yes \_\_\_\_\_ mmHg

Heart rate after intubation (within 60 minutes from the procedure) available?

YES  NO

If Yes \_\_\_\_\_ /min

Need of new/increase of vasopressors/inotropes after intubation?

YES  NO

Specify all inotropes/vasopressors that apply:

Norepinephrine; rate of infusion: \_\_\_\_\_ mcg/Kg/min

Epinephrine; rate of infusion: \_\_\_\_\_ mcg/Kg/min

Dopamine; rate of infusion: \_\_\_\_\_ mcg/Kg/min

Dobutamine; rate of infusion: \_\_\_\_\_ mcg/Kg/min

Other; please specify: \_\_\_\_\_ rate of infusion: \_\_\_\_\_ mcg/Kg/min

Fluid bolus administered after intubation (within 60 minutes from the procedure)? YES  NO

Total volume of administered fluid after intubation (within 60 minutes from the procedure) \_\_\_\_\_ ml

Arterial blood gas analysis available after the procedure? (within 1 hour) YES  NO

Specify FiO2 % \_\_\_\_\_ %

PEEP (cmH2O) \_\_\_\_\_

PaO2 \_\_\_\_\_  mmHg  kPa

PaCO2 \_\_\_\_\_  mmHg  kPa

PH \_\_\_\_\_

HCO3- (mEq/L - mmol/L) \_\_\_\_\_

Base excess (BE) \_\_\_\_\_

Lactate (mmol/L) \_\_\_\_\_

Adverse events

New onset cardiac arrhythmia (within 60 minutes from intubation)?

YES  NO

If yes:

Atrial fibrillation

Ventricular tachycardia

Other \_\_\_\_\_

Cardiac arrest (within 60 minutes from intubation)

YES  NO

If YES,  with return of spontaneous circulation (ROSC)  with death

Specify the supposed main reason for cardiac arrest development:

- Hypoxia
- Hypovolemia/Hemodynamic collapse
- Hypo/-hyperkalemia
- Tension pneumothorax
- Cardiac tamponade
- Thrombosis (coronary or pulmonary)
- Toxins
- Other \_\_\_\_\_

Aspiration of gastric contents (detected within 24 hrs from intubation)? (Inhalation of gastric contents into the larynx and the respiratory tract) YES  NO

Dental injury due to airway management?

(Any notable change to the patient's dentition attributable to the procedure of endotracheal intubation)

YES  NO

Airways injury due to airway management (detected within 24 hrs from intubation)?

(Any detectable/clinically relevant airways injury attributable to the endotracheal intubation procedure, e.g. bleeding, tracheal tear/laceration)

YES  NO

Specify the type of airways injury:

- Tracheal laceration
- Bronchial laceration
- Laryngeal laceration
- Other \_\_\_\_\_

Detection of pneumothorax within 24 hrs from intubation? YES  NO

Detection of pneumo-mediastinum within 24 hrs from intubation? YES  NO

### **STATUS AT ICU DISCHARGE**

Date of ICU discharge \_\_\_\_\_

Status at ICU discharge

- Dead
- Alive
- Other \_\_\_\_\_

### **STATUS AT HOSPITAL DISCHARGE**

Date of Hospital discharge \_\_\_\_\_

Status at Hospital discharge

- Dead
- Alive