Dilatational percutaneous vs Surgical tracheostomy in intensive Care unit: A Practice Pattern Observational Multicenter Study (DISSECT study)

An ISCCM Research Project

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CASE RECORD FORM

I. PATIENT DEMOGRAPHIC DATA

1. Gender: □ Male □ Female

2. Age ________ Years

3. Co-morbidities

□ Hypertension □ Diabetes Mellitus □ Hypothyroidism
□ Hyperthyroidism □ Chronic kidney disease □ Coronary artery disease
□ Chronic Liver disease □ COPD □ Malignancy □ None

4. Clinical parameters

a. Glasgow Coma Scale

□ GCS ≤ 8 □ GCS 9-12 □ GCS 13-15

b. Ventilatory parameters

□ Controlled ventilation mode with FiO$_2$ < 0.40

□ Controlled ventilation mode with FiO$_2$ > 0.40

□ Spontaneous mode with FiO$_2$ < 0.40

□ Spontaneous mode with FiO$_2$ > 0.40

□ On T-piece

□ Non intubated
c. **Hemodynamic parameters**

- Noradrenaline < 0.1 ug/kg/min
- Noradrenaline > 0.1 ug/kg/min
- Noradrenaline > 0.1 ug/kg/min + any other vasopressor
- No vasopressor

d. **Coagulation parameters**

- Platelet count > 100 x 10^9/L Transfusion planned: ☐ Yes ☐ No
- Platelet count 50-100 x 10^9/L Transfusion planned: ☐ Yes ☐ No
- Platelet count < 50 x 10^9/L Transfusion planned: ☐ Yes ☐ No
- INR < 1.5 Transfusion planned: ☐ Yes ☐ No
- INR > 1.5 Transfusion planned: ☐ Yes ☐ No

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**II. PROCEDURE RELATED DATA**

**A. PRE TRACHEOSTOMY**

1. Date of Procedure______________________

2. *Type of Tracheostomy decided*

   - ☐ Surgical
   - ☐ Percutaneous
3. **Indication for Tracheostomy**

- ☐ Neurological for long term airway protection
- ☐ As part of weaning process
- ☐ Emergency airway management
- ☐ Others, specify ________________________

4. **Timing of tracheostomy**

- ☐ Early (within 7 days of ventilator support)
- ☐ Late (after 7 days of ventilator support)

5. How many days on Ventilator / NIV / HFNC ________________

6. Place of Procedure:    ☐ ICU    ☐ Operation Theatre

7. If percutaneous tracheostomy, the technique used (if surgical, proceed to 8)

- ☐ Single Dilator    ☐ Multiple dilator    ☐ Griggs forcep’s

8. If surgical, then reason

- ☐ Adequate skill not present    ☐ Admitting consultant opinion
- ☐ Platelet Count < 50,000    ☐ PDT kit not available
- ☐ INR > 1.5    ☐ Cost of PCT procedure is higher
- ☐ Short Neck    ☐ Bronchoscopy or USG not available for PCT
- ☐ Others, specify ________________________
9. **Neck anatomy assessed by**

- [ ] Ultrasound
  - [ ] Excellent
  - [ ] Good
  - [ ] Unsatisfactory

- [ ] Neck circumference __________ cm

- [ ] Cricosternal distance __________ cm

- [ ] Clinical

**B. DURING TRACHEOSTOMY**

1. **Guidance used**

- [ ] Ultrasound
- [ ] Bronchoscopy
- [ ] None

2. Number of attempts __________

3. **Sedation & Paralysis used**

- [ ] Propofol / Thiopentone / Ketamine
  - Dose: __________

- [ ] Dexmedetomidine
  - Dose: __________

- [ ] Fentanyl / Morphine
  - Dose: __________

- [ ] Midazolam
  - Dose: __________

- [ ] Succinylcholine / Rocuronium
  - Dose: __________

- [ ] Vecuronium / Atracurium / Cisatracurium
  - Dose: __________

- [ ] None
III. OPERATOR RELATED DATA

1. Procedure performed by:

   □ Intensivist      □ Anaesthesiologist      □ Pulmonologist      □ ENT surgeon

   □ Others, specify ________________________________

2. How many tracheostomies have been approximately performed by the performer?

   □ < 10         □ 10-25        □ >25

IV. COMPLICATIONS RELATED DATA

1. Minor Complications

   □ Estimated blood loss 10 - 15 ml        □ SpO₂ < 90% for < 5 minutes

   □ Hypotension for < 5 minutes        □ Posterior wall puncture

   □ Subcutaneous emphysema on CXR       □ None

2. Major Complications

   □ Estimated blood loss > 15 ml        □ SpO₂ < 90% for more than 5 minutes

   □ Hypotension for > 5 minutes        □ New requirement of ventilator support

   □ New requirement of vasopressor therapy       □ False tract

   □ Need to perform BAL post procedure       □ Pneumothorax

   □ Abandoning the procedure        □ Death during procedure

   □ None
V. OUTCOME RELATED DATA

1. Duration of procedure: _______________ mins

2. Outcome of the procedure:

   - PDT Successful
   - ST Successful
   - PDT converted to surgical

3. Time from decision of tracheostomy to actual procedure: _______hh: _______ mins

4. Ventilator duration post tracheostomy: ___________hh: ___________ mins

5. Total ventilator free duration in 7 days follow up: ___________hh: ___________ mins

6. Cost of procedure:

   - < 10000 Rs
   - 10000 – 20000 Rs
   - >20000 Rs