

Percutaneous Dilatational Tracheostomy

Indications :

1. COVID-19 patients ventilated for 14 days on minimal or close to minimal vent settings - peep less than 8; fio2 less than 50%.
2. 2 negative COVID-19 tests separated by at least 24 hours within the 72 hours prior to the procedure
3. In surge conditions - patients who may not quite meet the vLOS criteria but it is thought that an early tracheostomy would hasten weaning of the vent and make ventilator available for another patient. Consideration for tracheostomy in patients who remain COVID-19 positive and/or at higher ventilator settings to be made a case-by-case basis during surge conditions

PRE-PROCEDURE:

Location - Patient's ICU room

Considerations

Negative pressure room ideally

Tube feeds held at least 6 hours prior to procedure.

Therapeutic anticoagulation held 24 hours prior to procedure.

Personnel

Airway Manager – Bronchoscopist/Critical Care Physician

PDT proceduralist – Critical Care Physician or other

Medications

Fentanyl 200mcg

Versed 10mg

Ketamine 2mg/kg actual body weight

Propofol 100mg

Phenylephrine 10 mL of 100mcg/mL

Rocuronium 100mg

A bag of levophed spiked and hanging

Propofol for post-procedure sedation

Equipment needed

Trach kit (sizes 6 and 8 DCT; 6 and 8 Proximal XLT)

2.0 silk sutures x 2

Sterile flush syringes x 3

Gloves x 2 sets for proceduralist and bronchoscopist

N95 mask x 2/N100 x2/Face shields x 2

Goggles x2

4 pack sterile towels

GlideScope or McGRATH video laryngoscope

Disposable Bovie electrocautery

PROCEDURE

Preprocedural ventilation and oxygenation

100% preoxygenation x 5 minutes

Time out

Procedure to be performed under apnea conditions

Administer paralytics & sedation prior to positioning patient.

Supine position with cervical extension & arms tucked

Bronchoscopic procedures

Following induction bronchoscopist inserts bronch into endotracheal tube, inspects Airway and suctions if necessary

Withdraw ETT to 19 CM leaving bronchoscope inside ETT

Trach cannulation procedures

Okay to dissect pre-tracheal tissue prior to cannulation to reduce actual procedure time with trachea cannulated.

Procedure is expected to take place quickly under apneic conditions, but it is okay to place cover towel over surgical field if need to ventilate. Only ventilate when surgeon calls for it.

POST PROCEDURE

Place ETT in a red biohazard bag for disposal