



**PROCEDURES
PROC-01J**

**PERCUTANEOUS
TRANSTRACHEAL
VENTILATION (JET VENT)**

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General:

- This procedure provides a temporary measure to secure an airway to oxygenate and ventilate a patient in severe respiratory distress when less invasive techniques (eg, bag-valve-mask ventilation, King Airway ventilation, endotracheal intubation) have failed or are not likely to be successful and is intended as a temporary measure until a surgical airway can be performed

Indications:

- Patient cannot receive adequate respiratory assistance with BVM and supplemental O2 after a failed intubation attempt.
- Critical patient with severe maxillo-facial-trauma, inflammation or severe swelling of the airway or other mechanism resulting in a life-threatening airway compromise.
- This is for the hypoxic patient who cannot survive/will not tolerate a one to two minute period to perform a surgical airway.
- Pediatric patients where surgical airway is contraindicated
- Do not delay utilization of Jet Vent for patients in a can't ventilate/can't intubate/in extremis situation while preparing for intubation, king airway or surgical airway (The Jet Vent may be utilized as a first line rescue measure)
- For example, in the hypoxic patient with significant facial injury, this may be the primary means of oxygenation/ventilation

Contraindications:

- An airway obtainable by any other means.

Procedure:

1. Maintain ventilation and airway clearance attempts while preparing equipment.
2. Assemble equipment: 14G cannula with 10ml syringe attached, oxygen tubing firmly connected to flow meter then connect with 10-15lpm flow.
3. Identify the Cricothyroid membrane, between the Thyroid cartilage and the Cricoid cartilage.
4. Cleanse site with chloraprep.
5. Insert cannula tip through the skin and membrane in one firm push, angled at 45° downward until a 'give' is felt.
6. Aspirating back on the syringe as the cannula is inserted; air will freely enter the syringe as the cannula enters the trachea, confirming proper placement in the trachea.
7. Slide cannula over the needle into the trachea and secure. Attach the oxygen tubing to the catheter and oxygen source at 50psi. Ventilate patient with 1-5 second burst at a rate of 12-20 per minute.
8. Occlusion of upper airway may assist in achieving greater tidal volume.
9. Prepare for surgical airway.