RECOGNISING AND MANAGING A BLOCKED TRACHEOSTOMY TUBE

Staff this document applies to:
Medical Staff, Nurses, Physiotherapists and Speech Pathologists on all campuses

Who is authorised to perform this procedure:
Medical staff, Nurses and Physiotherapists

State any related Austin Health policies, procedures or guidelines:
- Mandatory Equipment & Emergency Tracheostomy Management Poster
- Humidification of Inspired Gases in Patients with Tracheostomy
- Changing a Tracheostomy Tube
- Suctioning via the Tracheostomy
- Tracheostomy Cuff Management
- Escalation Response to Clinical Deterioration - Austin Hospital

Definition:
- A blocked tracheostomy tube is one in which airway patency is compromised by:
  - dried secretions
  - blood clots
  - a displaced over-inflated cuff
  - the tracheal wall (if the tracheostomy tube is malpositioned)

- Indicators that a tracheostomy tube is blocked:
  - The tracheostomy tube feels roughened when passing a suction catheter
  - There is resistance felt when passing a suction catheter
  - Inability to pass a suction catheter through the tracheostomy tube

Clinical Alert:
- A blocked tracheostomy tube is an emergency, and can result in respiratory arrest or death. Call a Code Blue.
- A partially blocked tracheostomy tube can quickly progress to becoming completely blocked, and should be regarded as an impending emergency. If unable to restore complete patency, the tracheostomy tube should be changed
- Respiratory distress, increased work of breathing, or increased airway pressures in mechanically ventilated patients, should be assumed to be due to tracheostomy tube blockage until proven otherwise.
**Expected Outcome**

- Maintaining a patent tracheostomy tube is vital to the safety of the patient
- A patient who has a blocked tracheostomy tube will have their airway cleared or re-established quickly and safely.

**Equipment:**

- Functioning suction equipment
- Suction catheters: standard size FG12
- Tracheostomy tube of the same size and 1 size smaller.
- Sterile normal saline ampoules
- 10ml syringes.
- Non sterile gloves.
- Cuff manometer (if tracheostomy has an air filled cuff)
- Air viva with face mask and tracheostomy connector
- Pulse oximeter.
- Refer also to: Mandatory Equipment & Emergency Tracheostomy Management Poster
Procedure: If Tracheostomy Tube is Blocked or Apparently Blocked:

1. **Blocked Tracheostomy Tube**
   - If an inner cannula is present, remove it.
   - Does the patient now have a clear airway?

   - **No**
     - Deflate the cuff so that the patient can breathe around the tube.

   - **Yes**
     - Clean and replace the inner cannula.

2. Is the patient invasively ventilated via tracheostomy?
   - **Yes**
     - Call a CODE BLUE and ventilate via the nose and mouth using Air Viva with mask attachment.
   - **No**
     - Call a CODE BLUE and give oxygen via the nose/mouth in order to maintain oxygen saturations.

3. Whilst waiting for specialist airway responder, perform saline lavage and suction.
• If the tracheostomy remains blocked, the tracheostomy should be changed:
  o If it is > 7 days post initial insertion of the tracheostomy, trained clinical staff may change the tracheostomy
  o If it is < 7 days post initial insertion of the tracheostomy, the tracheostomy must be changed by an airway specialist

• Specialist airway responders (ICU Consultant, Anaesthetist, ENT, Thoracic or Maxillofacial surgeon): refer also to the reverse side of Emergency Tracheostomy Management Poster

Post Procedure:

• Recheck all oxygen and humidification equipment.
• The treating medical team and ward physiotherapist should be notified.
• The patient must remain on a humidifier that heats to a guaranteed 37°C. The use of a Heat Moisture Exchanger (HME) is not acceptable until reviewed by the TRAMS team, a senior physiotherapist or medical staff.
• Monitor oxygen saturations continuously with 30 minute vital observations for 2 hours
• Contact TRAMS on pager 1291 during business hours to review the patient and assist with strategies to prevent further episodes of tube obstruction.
• Document in medical history (including Riskman number)
• Complete Riskman

Legislation/References/Supporting Documents:

Agency for Clinical Innovation (2013), Care of Adult Patients in Acute Care Facilities with a Tracheostomy: Clinical Practice Guideline

Intensive Care Society Standards. Standards for the care of adult patients with a temporary tracheostomy (2014)


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TRAMS Policy and Procedure Committee (Updated October 2018)

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Deteriorating Patient Committee
Austin Airway Group
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Tracheostomy Review and Management Service (TRAMS)