Emergency Management of the laryngectomy patient with breathing difficulties

1. **Call for airway expert help (Anaesthetics / Critical Care / ENT)**
2. **Look, listen & feel at the mouth and laryngectomy stoma**
   - A Mapleson C system (“Waters circuit”) may help assessment if available
   - Use **waveform capnography** whenever available: exhaled carbon dioxide indicates a patent or partially patent airway

**Is the patient breathing?**

- **Yes**
  - **Apply high flow oxygen to laryngectomy stoma**
    - (use tracheostomy mask or paediatric face mask)
    - If any doubt whether patient has a laryngectomy, **apply oxygen to face also**
  - Continue ABCDE assessment

- **No**
  - **Call Resuscitation Team**
  - **CPR if no pulse / signs of life**
  - **Assess laryngectomy stoma patency**

**Can you pass a suction catheter?**

- **Yes**
  - The laryngectomy stoma is patent
    - Perform tracheal suction
    - Consider partial obstruction
    - Ventilate via stoma if not breathing
    - Continue ABCDE assessment

- **No**
  - **Deflate the cuff (if present)**
  - **Look, listen & feel at the laryngectomy stoma or tube**
    - Use waveform capnography or Mapleson C if available

**Is the patient stable or improving?**

- **Yes**
  - Continue ABCDE assessment

- **No**
  - **Call Resuscitation Team**
  - **CPR if no pulse / signs of life**

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**Most laryngectomy stomas will NOT have a tube in situ**

- **Remove stoma cover (if present)**
- **Remove inner tube (if present)**
  - Some inner tubes need re-inserting to connect to breathing circuits
  - Do not remove a tracheoesophageal puncture (TEP) prosthesis

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- **No**
  - **Deflate the cuff (if present)**
  - **Look, listen & feel at the laryngectomy stoma or tube**
    - Use waveform capnography or Mapleson C if available

**Is the patient stable or improving?**

- **Yes**
  - Continue ABCDE assessment

- **No**
  - **Call Resuscitation Team**
  - **CPR if no pulse / signs of life**

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**Laryngectomy patients have an end stoma and cannot be oxygenated via the mouth or nose**

Applying oxygen to the face and stoma is the default emergency action for all patients with a tracheostomy

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**Laryngectomy stoma** ventilation via either
- Paediatric face mask applied to stoma
- LMA applied to stoma

**Secondary emergency oxygenation**

- **Attempt intubation of laryngectomy stoma**
  - Small tracheostomy tube / 6.0 cuffed ETT
  - Consider Aintree catheter and fibreoptic scope / Bougie / Airway exchange catheter

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**Primary emergency oxygenation**

- **Apply high flow oxygen to laryngectomy stoma**
  - (use tracheostomy mask or paediatric face mask)
  - If any doubt whether patient has a laryngectomy, **apply oxygen to face also**

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*Adapted from National Tracheostomy Safety Project*