Clinical Practice Procedures: Airway management/Suctioning

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<table>
<thead>
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<th>Date</th>
<th>October, 2017</th>
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<tr>
<td>Purpose</td>
<td>To ensure a consistent procedural approach to Suctioning.</td>
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<tr>
<td>Scope</td>
<td>Applies to all QAS clinical staff.</td>
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<tr>
<td>Author</td>
<td>Clinical Quality &amp; Patient Safety Unit, QAS</td>
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Critically ill patients have a weakened ability to spontaneously clear secretions. The appropriate suctioning of soiled airways decreases the risk of aspiration, promotes optimal pulmonary gas exchange and prevents nosocomial pneumonia.

The QAS supplies three (3) suction adjuncts:

<table>
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<tr>
<th>Y-suction catheter</th>
<th>(size 6, 8, 12 &amp; 16 FG)</th>
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<tr>
<td>Yankauer catheter</td>
<td>(single size only)</td>
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<td>Meconium aspirator</td>
<td>(single size only)</td>
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**Y-suction catheter**
A soft flexible catheter typically used for suctioning endotracheal tubes. Additionally suitable for the suctioning of the patient’s nares, nasopharynx, oropharynx, stoma, tracheostomy and airway adjuncts.

**Yankauer catheter**
Rigid plastic catheter with a large suction tip surrounded by a bulbous head used to remove secretions from the oropharynx and external nares.

**Meconium aspirator**
Rigid plastic suction aid used in conjunction with an ETT to aid in the removal of meconium.
**Procedure – Airway suctioning**

**PROCEDURE – oropharyngeal suctioning**

1. Open the Yankeur suction catheter packaging to expose (only) the connection port.
2. Ensure the catheter is connected to the suction tubing and the suction tubing is connected to an appropriate suction device.
3. If variable suction is available, adjust the suctioning pressure accordingly:
   - **Neonates:** 60–80 mmHg
   - **Paediatrics:** 80–100 mmHg
   - **Adults:** 80–120 mmHg
4. Test for adequate suction by occluding the catheter’s side port.
5. Remove the suction catheter from the packaging.
6. With the side port remaining open, gently insert the catheter’s tip into the patient’s oral cavity.
7. Activate suctioning whilst gently withdrawing the catheter from the oropharynx.
8. Ensure the commencement of appropriate oxygenation/ventilation.
   If required, repeat the suctioning procedure.

**PROCEDURE – nasopharyngeal suctioning**

1. Select the appropriate size Y-suction catheter.
2. Open the Y-suction catheter packaging to expose (only) the connection port.
3. Ensure the catheter is connected to the suction tubing and the suction tubing is connected to an appropriate suction device.
4. If variable suction is available, adjust the suctioning pressure accordingly:
   - **Neonates:** 60–80 mmHg
   - **Paediatrics:** 80–100 mmHg
   - **Adults:** 80–120 mmHg
5. Test for adequate suction by occluding the catheter’s side port.
6. Remove the suction catheter from the packaging.
7. With the side port remaining open, gently insert the catheter’s tip into the patient’s nostril down to the back of the throat. If resistance is felt, or the patient’s cough reflex is stimulated, remove and attempt reinsertion.
8. Activate suctioning whilst gently withdrawing the catheter in a rotating motion.
9. Ensure the commencement of appropriate oxygenation/ventilation. If required, consider repeating using the alternate nostril.

**PROCEDURE – tracheostomy tube suctioning**

1. Select the appropriate size Y-suction catheter (suction catheters should be half the size of the tracheostomy tube).
2. Open the Y-suction catheter packaging to expose (only) the connection port.
3. Ensure the catheter is connected to the suction tubing and the suction tubing is connected to an appropriate suction device.
4. If variable suction is available, adjust the suctioning pressure accordingly:
   - Neonates: 60–80 mmHg
   - Paediatrics: 80–100 mmHg
   - Adults: 80–120 mmHg
5. Test for adequate suction by occluding the catheter's side port.
6. Remove the suction catheter from the packaging ensuring that the distal catheter’s sterility is maintained.
7. If present, remove the patient’s heat moisture exchanger (swedish nose), BVM or ventilator circuit.

8. With the side port remaining open, gently insert the catheter’s tip into the patient’s tracheostomy advancing to just beyond the tube’s distal opening (the total length plus 0.5 cm).
9. Activate suctioning whilst gently withdrawing the catheter in a rotating motion.
10. Ensure the commencement of appropriate oxygenation/ventilation. If required, repeat the suctioning procedure.
PROCEDURE – Airway suctioning (meconium)

1. Ensure the meconium aspirator is connected to the suction tubing.
2. Intubate newly born with an appropriately sized ETT.
3. Once successfully intubated, connect larger end (15 mm OD) of the meconium aspirator to the ETT adapter.
4. Occlude the suction control port to regulate the suction.
5. Whilst suctioning, gently withdraw the ETT to remove the meconium – suctioning should be limited to ≤ 2 second episodes.

+ Additional information

- The potential for aerosolised sputum exposure is HIGH. All precautions that serve to minimise risk to the clinician are to be applied.
- The size of the Y-suction catheter should be less than half the internal diameter of the endotracheal/tracheostomy tube.
- If variable suction is available, adjust the suctioning pressure accordingly:
  - Neonates: 60–80 mmHg
  - Paediatrics: 80–100 mmHg
  - Adults: 80–120 mmHg