B-220 R Nasopharyngeal and Nasotracheal Suctioning

Purpose
Maintain a patent airway.
Facilitate air exchange by removing or mobilizing secretions from upper and lower airways.

Applies To
- Registered Nurses
- Licensed Practical/Vocational Nurses
- Other (Identify): ________________________________

Equipment/Supplies
- Suction machine and connector tubing.
- Gloves (two sterile, or one sterile and one disposable).
- Sterile suction catheter (size 12-16 Fr. for adult; 6-12 Fr. for child).
- Sterile normal saline or water (approximately 100ml).
- Water soluble lubricant.
- Sterile basin.
- Oxygen, if needed by client.
- Nasal or oral airway as indicated.

Procedure
1. Wash hands. Refer to the Hand Washing procedure. Assess the client's respiratory status, skin color and temperature, vital signs, color amount and consistency of secretions and family caregiver’s ability to perform procedure.
2. Assist the client into a semi-Fowler’s position, if appropriate. Cover chest with a small towel.
3. Turn on the suction machine. Set vacuum regulator to appropriate negative pressure if machine is variable. *Excessive negative pressure damages nasal pharyngeal and tracheal mucosa and can induce greater hypoxia.*
4. Using sterile technique, open catheter and supplies. Put sterile water or normal saline into the basin. *Sterile technique is utilized with deeper suctioning to prevent infection.*
5. Don sterile gloves. If you use one disposable glove, apply it to the non-dominant hand and apply the sterile glove to the dominant hand. *Sterility of the catheter can be maintained with only one sterile glove, as the nondominant hand will not need to touch the catheter itself.*
6. Attach the suction catheter to tubing while maintaining the catheter’s sterility. Insert catheter tip into sterile water or normal saline and suction a small amount.

7. Measure catheter:
   a. *Nasopharyngeal Suctioning*: Measure catheter from nose tip to base of earlobe (approximately 16 cm in adults; 8-12 cm in older children; 4-8 cm in young children and infants).
   b. *Nasotracheal Suctioning*: Measure catheter from nose tip to earlobe and downward to thyroid cartilage or neck (approximately 20-24 cm in adults; 14-20 cm in older children; 8-14 cm in young children and infants).

8. Lubricate the tip of the catheter with water-soluble lubricant.

9. With your thumb off the control, insert the catheter through the nares using a slight downward slant. Have the client breathe slowly and deeply as the catheter is advanced.
   a. Advance the catheter as far as possible to the measured length.
   b. Inserting the catheter without suction minimizes the risk of mucosal damage and hypoxia.
   c. The epiglottis is open during inspiration and facilitates placement into the trachea.

10. Monitor catheter placement by observing for air flow through the catheter as the client breathes and/or coughs.
    a. Air should pass through the catheter as the client breathes.
    b. Coughing should also be stimulated.
    c. If the client gags or is nauseated, the catheter is probably in the esophagus.

11. Apply intermittent suction (10-12 sec.) by placing and removing the thumb over suction control as the catheter is gently withdrawn while rotating it back and forth between the thumb and index finger. Intermittent suction minimizes hypoxia and injury to mucosa.

12. Place the catheter into a basin of water or normal saline. Apply suction to rinse the catheter and connecting tubing.

13. Encourage the client to cough. Allow for rest periods and repeat this procedure until the airway is cleared. Limit suction time to 3-5 minutes. Reapply oxygen as needed.
    a. Coughing facilitates removal of secretions.
    b. Rest periods allow for rest and reoxygenation.
    c. Repeated passes with the suction catheter assist in clearing the airway of excessive secretions and promotes oxygenation.
14. Remove gloves and dispose of equipment according to the Agency Waste Disposal Policy.

**Documentation Guidelines**
Document in the clinical record:

1. Client’s tolerance of suctioning procedure.
2. Color, amount, and consistency of secretions.

**Related Procedures**
None

**Policy History**

<table>
<thead>
<tr>
<th>Approval Date</th>
<th>11/1/2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approved By</td>
<td>Anne Tyson, Herman Pippin, Sandra Hill</td>
</tr>
<tr>
<td>Revision Date</td>
<td>12/31/2009</td>
</tr>
<tr>
<td>Approved by</td>
<td>Anne Tyson, Herman Pippin, Sandra Hill</td>
</tr>
<tr>
<td>Revision Date</td>
<td>8/24/2011</td>
</tr>
<tr>
<td>Approved by</td>
<td></td>
</tr>
</tbody>
</table>