PURPOSE
To describe the procedure for collecting ciliated columnar respiratory epithelial cells from posterior nasopharynx for virus testing.

PERSONNEL
RNs, RTs
CMTs (see individual department competency guidelines)

GENERAL INFORMATION
1. Perform nasopharyngeal wash for viral cultures on all hospitalized patients and all immunocompromised patients in all settings.
2. Refer to the table below for recommended suction catheter sizes and suction pressures based upon age of the patient.

<table>
<thead>
<tr>
<th>Patient Age</th>
<th>Catheter Size</th>
<th>Suction Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Premature Infant</td>
<td>6</td>
<td>80-100 mm Hg</td>
</tr>
<tr>
<td>Infant / Toddler</td>
<td>8</td>
<td>80-100 mm Hg</td>
</tr>
<tr>
<td>School Age</td>
<td>10</td>
<td>100-120 mm Hg</td>
</tr>
</tbody>
</table>

EQUIPMENT
1. Personal protective equipment.
2. Facial tissue.
3. Sterile nonbacteriostatic saline (e.g. bullets).
4. Sealable biohazard bags.
5. If mechanical suction is used:
   a. Suction pump or wall suction.
   b. DeLee™ suction trap.
6. If mechanical suction is not used:
   a. Closable sterile specimen container (e.g. sterile urine cup).
   b. 3-5 ml sterile disposable syringe.
   c. Sterile soft catheter, e.g. # 8 French feeding tube. Sizes and tubing length depend on age and size of patient.

PROCEDURE
1. Assemble equipment appropriate for method used (see below).
2. Don PPE. Remove excess mucus from patient’s nose with facial tissue. (Do not have patient blow their nose.)
3. Determine length of catheter tubing by measuring distance from tip of nose to external opening of ear. Mark length with thumb and forefinger.
4. Adjust suction to appropriate pressure.
5. Tilt patient’s head back to open airway (e.g. infant in “sniff position”). Instruct older patients not to swallow.
With Mechanical Suction
1. Attach DeLee™ suction trap to suction tubing, leaving wrapper on suction catheter. Turn on suction and adjust to appropriate pressure.
2. Add 0.5-4 ml saline to nostril (amount depends on patient’s size) to loosen secretions and dislodge cells.
3. Gently insert tube into nostril and posterior pharynx until the thumb and forefinger touch the patient’s nose. Do not use lubricants other than saline to aid tube insertion.
4. Apply suction while withdrawing and rotating tube. Catheter should remain in nasopharynx no longer than 10 seconds.
5. Hold trap upright to prevent loss of secretions from trap.
6. Repeat procedure for second nostril.
7. Disconnect suction.
8. Remove cap with tubing and place in biohazard waste.
9. Remove yellow cap from bottom of trap and place on top of DeLee™ trap.
10. Label trap at bedside and place in biohazard bag.
11. Discard suction tubing and suction canister in regular trash.
12. Tube specimen immediately to lab to preserve virus.

Without Mechanical Suction
1. When possible, this procedure should be performed by two care providers. Use catheter or feeding tube.
2. Fill syringe with 1-4 ml saline. Amount depends on size and age of patient.
3. Attach feeding tube to syringe.
4. Instill saline into one nostril, holding second nostril closed.
5. Aspirate fluid into syringe gently while withdrawing and rotating tube to dislodge cells and secretions.
6. Recovery must occur rapidly or instilled fluid will rapidly drain down the throat.
7. Inject the specimen into the container.
8. Repeat steps 1-5 with other nostril and inject specimen into same container.
9. Label specimen container at bedside and place in biohazard bag.
10. Discard syringes and tubing or bulb in regular trash.
11. Tube specimen immediately to laboratory to preserve virus.

DOCUMENTATION
Document date and time that specimen was obtained and sent to lab.

RELATED DOCUMENT
Specimen/Requisition Labeling Policy

REFERENCES

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