**Purpose**
To provide direction for transpyloric tube placement and feeding.

**Policy Statement**
Feeding tubes are commonly used in the neonatal nursery to provide enteral nutrition to premature and/or ill infants. Gastric feeding tubes are most often used for nutrition delivery. There is limited evidence that transpyloric tube feeding has any benefit over gastric tube feeding in premature infants. Transpyloric feeding tubes may be used if there is a concern with gastro-esophageal reflux, inability to protect airway due to such problems as vocal cord paralysis, gastric distention with continuous positive airway pressure, or a gastric motility disorder.

**Applicability**
All Covenant Health Neonatal Nursery staff.

**Equipment**
Transpyloric feeding tube – 6 Fr.
Duoderm and Tegaderm for securing tube
Sterile Water
5 or 10 mL enteral syringe

**Procedure**
**INSERTION OF TRANSPYLORIC FEEDING TUBE**

<table>
<thead>
<tr>
<th>ACTION</th>
<th>RATIONALE</th>
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<tr>
<td>1. Perform hand hygiene and gather equipment.</td>
<td>A clean technique is used.</td>
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<tr>
<td>2. Clear the nose and oropharynx by gentle suctioning as needed. Elevate the head of the bed and position baby on their back.</td>
<td>Elevation of head of bed 30° to 45° may help with insertion of the feeding tube.</td>
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<tr>
<td>3. Assess the need to bundle/restrain infant based on infant’s tone and activity.</td>
<td>Active infants are more likely to dislodge the feeding tube.</td>
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<td>4. Remove stylet from the feeding tube (if present). Measure the feeding tube from the mouth or bridge of nose, to the tip of the ear and then midway between the umbilicus and xyphoid. From this point, measure to the left or right lateral costal margin. Measure with the head in a</td>
<td>Weighted, stylet-containing tubes are not recommended in the neonatal population due to the risk of perforation. Accurate measurement ensures proper transpyloric tube placement.</td>
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lateral position for maximum depth required. Note the distance on the feeding tube.

5. Turn patient onto their right side and elevate the head of the bed 30° to 45° if not already done. This position should have gravity aid passage of the tube into the duodenum.

6. Support infant’s head with your fingers pressed against the infant’s cheek to open the mouth with the chin upward and in a straight line with the rest of the body. Proper positioning will allow easy placement of tube.

7. Lubricate the feeding tube with water. Pass the transpyloric tube orally or nasally to the predetermined depth. Lubricating with water makes passage of the tube easier.

8. Insertion of tube may cause bradycardia. Vagal stimulation induces bradycardia. Tactile stimulation should be given to raise the heart rate before proceeding.

9. Secure the tube. Duoderm and transparent dressing are preferred. The tube should be securely taped to prevent tube movement over time.
10. After approximately 10 minutes with the infant remaining on right side, check to ensure that the tip of the tube is in the proper position by the following methods:
   
   A. Inability to aspirate air
   B. Aspiration of bilious contents (gold/yellow in colour).
   C. The aspirate is alkaline (pH > 6)

   The infant could aspirate if the tube is placed incorrectly.

   A tube that does not pass the pyloris within the first 30 minutes is unlikely to pass in the next few hours. **Remove the tube if it is not in proper position after 30 minutes and start the procedure over again.**

11. Order abdominal x-ray to confirm placement of feeding tube.

   X-ray confirmation of placement is considered the standard of assessment prior to utilizing the feeding tube.

12. Once placement is confirmed continuous infusion may be initiated.

   Feeds **MUST** be administered continuously as the intestine cannot accommodate bolus feeds.

12. Chart the length of tubing extending beyond the nares or mouth, type and size of feeding tube inserted, route of insertion, method used to confirm placement of feeding tube and results of assessment of tube placement and action taken.

   See the Enteral Feeding P&P for the frequency of tube changes.

**MONITORING DURING FEEDS**

Throughout the continuous feed, verify tube placement by noting the measurement on the feeding tube and comparing it to the documented measurement following insertion. If a tube becomes dislodged, replace it rather than pushing it in further. Observe the infant for tolerance of the feed by monitoring:

   a. Respiration
   b. Colour and heart rate
   c. Gag and/or regurgitation
   d. Abdominal distension

   Increased respiration, duskiness and bradycardia may indicate aspiration. Bradycardia may also occur due to vagal stimulation. Gagging or regurgitation may result in aspiration as well. Abdominal distention may result if the infant is fed too quickly, or too large of a volume.

   If the infant begins to gag or regurgitate, clamp the feeding tube and stop the feeding. If infant has cyanosis, bradycardia or continues to regurgitate, withdraw feeding tube. Notify the nurse in charge.

**RELATED POLICIES AND PROCEDURES**

Enteral Feeding
Gastric Gavage Feeding

Revisions  Transpyloric Feeding Tube Insertion, July 2005
Signing

Original Signed

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June 25, 2013
DATE

July 8, 2013
DATE

July 11, 2013
DATE