



Child and Adolescent Nursing Practicum

Topic 4

Nasogastric or Gavage Feeding

By

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Objectives

1. Define the Gavage feeding
2. Enumerate the indication and contraindication for Gavage feeding
3. List possible Gavage complication
4. Practice Gavage feeding (check placement-feeding- flushing-follow up care)
5. Document findings in nursing chart process



Topics of Learning

- Indications & contraindication for Gavage feeding
- Potential Complication
- Feeding process
- Nursing care
- Documentation



Definition

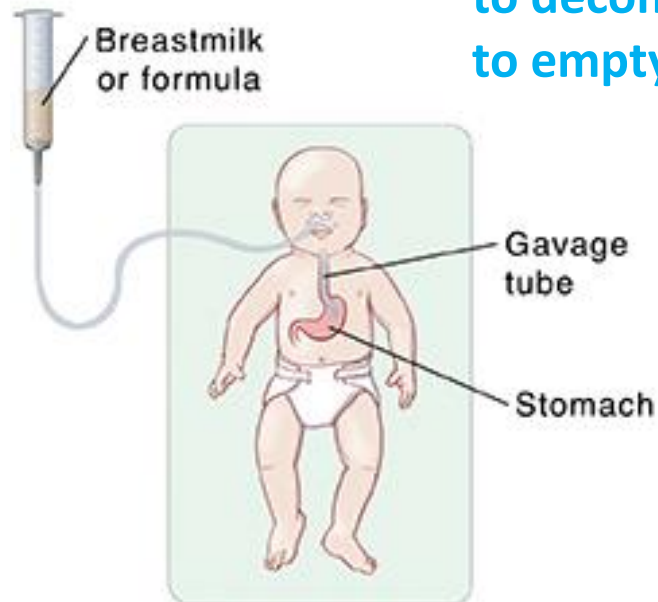


Gavage feeding is an artificial method of giving fluids and nutrients. This is a process of feeding with the tube (Nasogastric tube) inserted through the nose, pharynx, and esophagus and into the stomach.

to provide nutrition

to decompress stomach

to empty stomach of its contents in preparation for surgery or lavage.





Indications

- To provide a method of feeding or administering medication that requires minimal patient's effort, when the infant is unable to suck or swallow.
- To prevent fatigue or cyanosis that occur from nipple feeding.
- To provide a route that allows adequate calories or fluid intake.



- ✓ oral surgery
- ✓ cleft lip or cleft palate
- ✓ fracture of jaw
- ✓ in condition of difficulty in swallowing
- ✓ severe burns
- ✓ Malnutrition
- ✓ Prematurity
- ✓ acute and chronic infections
- ✓ unable to retain the food

Contraindication:- In case of Absent bowel sounds



Complications

- Nasal airway obstruction
- Aspiration pneumonia
- Ulceration or stomach perforation
- Irritation of the mucous membrane
- Incompetence of esophageal-cardiac sphincter
- Epistaxis



Nursing Alert!

Administration of feeding solution into an improperly placed tube may cause aspiration of the feeding into the lungs.



Differences between Types of feeding

Intermittent

- usually with syringe and by gravity only
- Need caution to prevent air from entering stomach
- Also called Gavage



Continuous infusion

- With Pump machine and order rate and time
- Air sensor
- Also called bolus





Feeding Procedure:- SELECTION OF NASOGASTRIC TUBE

- Select the feeding tubes based on the tube's composition, intended use, estimated length of time required, cost- effectiveness and tube features.
- Soft, flexible, small diameter tube (8 Fr to 12 Fr) is recommended for nasogastric feeding.
- Use Polyurethane or silicone tubes for anticipated long term feeding rather than polyvinylchloride tubes.
- Polyvinylchloride (PVC) tubes should be used for a short period of time usually for gastric drainage, decompression, lavage or diagnostic procedures.
- Smaller size feeding tube improves patient comfort. Common complications associated with the use of larger and stiffer tubes include nasopharyngeal erosions / necrosis, sinusitis and otitis media.



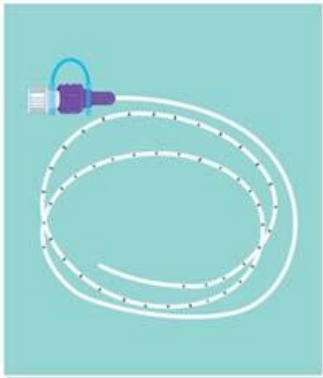
- Preterm 5-6 Fr.
- Term 6-8 Fr.
- Infant-Small Child 8 Fr.
- Child 8-10 Fr.



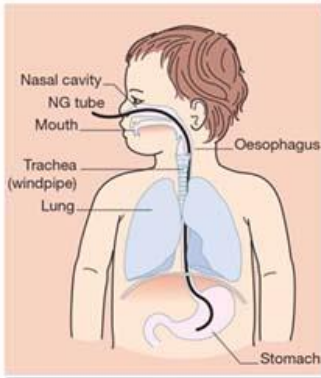


Feeding Procedure

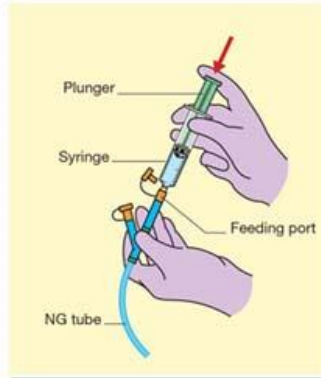
Nasogastric tube feeding



Position of NG tube



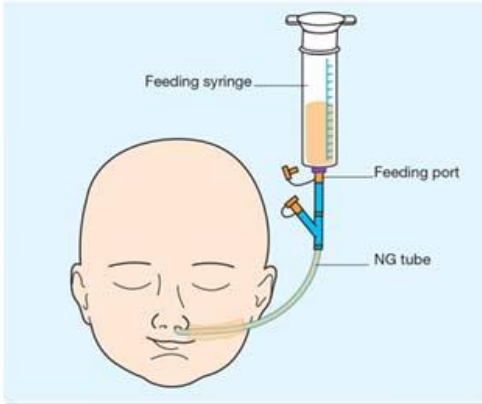
Withdraw 0.5 ml-1 ml aspirate



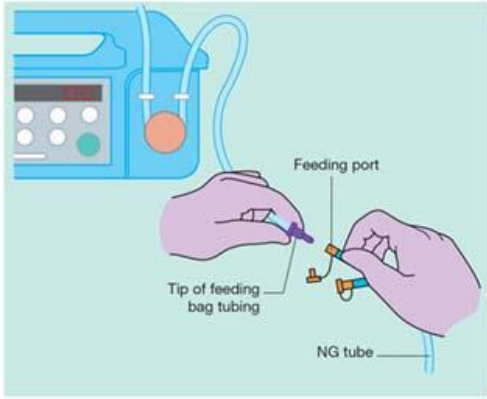
pH paper to test aspirate



Bolus feed



Prime giving set and connect to NG tube



Feeding pump





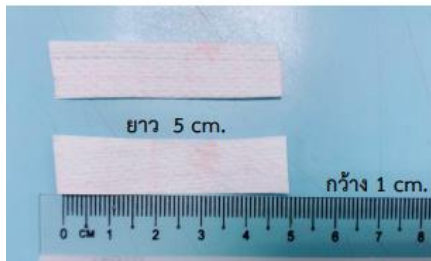
NG/OG placement Procedure

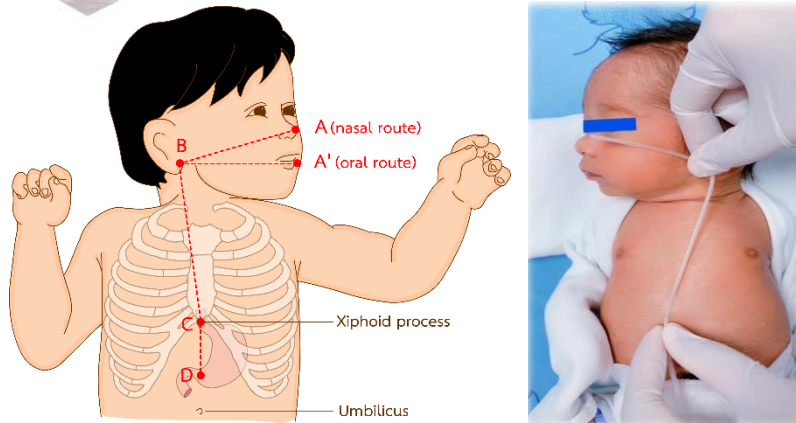


1. Obtain a physician's order for NG or OG insertion.
2. Assemble all required equipment:
 - Appropriate size of feeding tube
 - 3 or 5 or 10 cc Syringe
 - Stethoscope
 - Tape

****Do not leave catheter under radiant warmer lights for ANY length of time, or it will become too soft for insertion.**

3. Infant may be in prone position or head turned to right side.



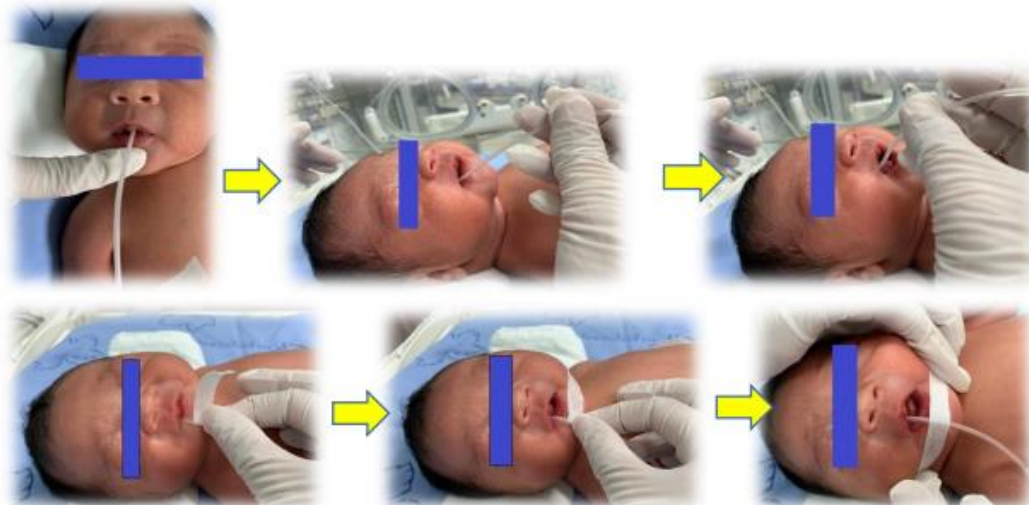


NG/OG placement Procedure

4. Measure the length of tubing from the infant's nose to the infant's ear lobe, then to the tip of the xiphoid process, and mark the position of the tube.

5. Flex the newborn's chin on his chest to facilitate passage. The tube may be lubricated with sterile water. Insert tube to the distance measured through mouth or nares pointing downward.

**If resistance is met, discontinue procedure and notify the physician.





NG/OG placement Procedure

6. Check for tube placement

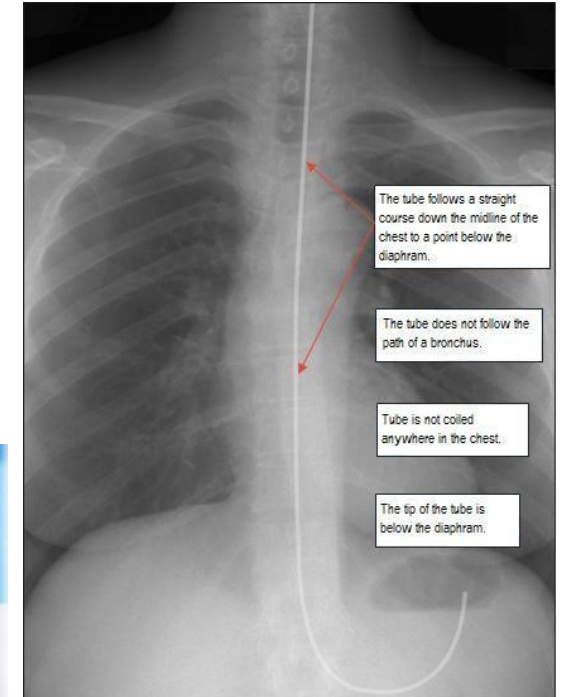
6.1 Inject 3-5 ml air into the catheter and the stomach. At the same time listen to the typical growing stomach sound with a stethoscope placed over the epigastric region.

6.2 Chest X-ray to confirm the correct placement read by physician .

6.3 Put the end of the catheter in cup filled with water, if you see bubbles the tube is in the lung.

6.4 Aspirate small amount of stomach content and test acidity by pH tape.(3 or under)

6.5 Observe and gently palpate abdomen for the tip of the catheter. *Avoid inserting catheter into the infant's trachea.*





NG/OG placement Procedure

7. Monitor the infant's heart rate and color during procedure.
8. After desired placement has been reached, secure with tape.
(Avoid occlusion of the nares)
8. Perform aspiration/feeding.
9. Document size of catheter used, time of insertion, infant's toleration of procedure, vital signs, and amount of aspirate or residual obtained.



Feeding Procedure

1. Aspirate tube before feeding begins:
 - a. If over $\frac{1}{2}$ the previous feeding is obtained, withhold the feeding.
 - b. If small residual of formula is obtained discarded it and subtract that amount from the total amount of the formula to be given.





Feeding Procedure

2. Pour the feeding formula. Be careful no air should go in the catheter.
3. Feeding The flow of feeding should be slow:

- Do not apply pressure.
- Elevate syringe 15-20cm, above the patient's head.

Rationale: The rate of flow is controlled by the size of feeding catheter: the smaller the size, the lower the flow.

4. Food taken too rapidly will interfere with peristalsis, causing abdominal distention and regurgitation.
5. Feeding time should last approximately as long as when a corresponding amount is given by nipple 5ml/5-10 minutes or minutes total time.





Feeding Procedure

6. When the feeding is completed, the catheter may be flushed with clear water. Before the fluid reaches the end of the catheter clamp it off

Rationale: If air enters the stomach and causes abdominal distention.

7. Burp the baby

Rationale: Adequate expulsion air swallowed or ingested during feeding will decrease abdominal distention and allow for better tolerance of feeding.

8. Place the patient on right side or on abdomen for at least 30 minutes.

Rationale: To facilitate gastric emptying and minimize regurgitation and aspiration.

9. Observe condition after feeding: bradycardia and apnea may still occur.

Note any vomiting or abdominal distention.

Rationale: Due to over feeding or too rapid feeding. Regurgitation of 1-2ml may occur in the premature infant as the sphincter of the GIT is relaxed and allow for easy reflux.

10. Follow up care Note infant's activity.

Rationale: Fatigue or peaceful sleep





Conclusion

- Patients in the hospital, as well as home care settings, often require nutritional supplementation with enteral feeding.
- Enteral feeding can be administered via nasogastric, nasoduodenal and naso-jejunal means.
- The focus of this clinical practice guideline is on the nursing management of nasogastric tube feeding.
- Nasogastric tube feeding may be accompanied by complications.
- Thus, it is important for the practitioner to be aware of how to prevent these complications so that nasogastric tube feeding can be administered successfully and safely.



Let's watch the this clip...



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Child and Adolescent Nursing Practicum

Next Topic

Drug Administration in Pediatric



Do not forget to do your assignment &
See you soon....

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