OLIVE VIEW-UCLA MEDICAL CENTER/HEALTH CENTERS
POLICY & PROCEDURE

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VERSION: 4

SUBJECT/TITLE: **INSERTION OF FEEDING/ENTERAL TUBES, ENTERAL FEEDING AND MEDICATION ADMINISTRATION: ADULT (ADULT)**

POLICY: All Registered Nurses and Licensed Vocational Nurses will utilize this as a guide for insertion of adult feeding/enteral tubes and enteral feedings.
Enteral tube feeding safety will be maintained through each phase of enteral Nutrition.

PURPOSE:

1. The purpose of enteral tube nutrition is to achieve the nutrition requirements and recommended daily allowance of vitamins and minerals.
2. The use of enteral feedings maintains gastrointestinal (GI) function and integrity.
3. To administer medications through enteral tubes using the proper technique and observing the necessary safety precautions for the patient.
4. Enteral tubes can be used for stomach decompression.

DEPARTMENTS: **ALL**

DEFINITIONS: **Enteral tube feedings** are a method of providing nutritional support or medication administration to patients, using a nasogastric (NG) tube, orogastric (OG) tube or gastrostomy tube (GT). Keofeed tubes are inserted by physician only.

EQUIPMENT LIST:

NG/OG Tube Insertion

1. Non-sterile gloves.
2. Disposable NG tube.
3. Sterile Water
4. Water-soluble lubricant.
5. 60cc syringe with catheter tip.
6. Roll of paper tape.
7. Stethoscope.
8. ENFit Adapter

Tube Feedings/Medication Administration

1. Stethoscope.
2. (1) 60cc syringe
3. Sterile Water
4. Enteral feeding bag and administration set.
5. Prescribed enteral formula/medication(s)

6. Enteral feeding pump.

PROCEDURE:

A. <u>ENTERAL TUBE INSERTION – NG, OR OG:</u>

1. Properly identify the patient.
2. Explain the procedure to patient/family and potential discomfort.
   - Answer questions as they arise and reinforce information as needed.
3. Position the patient sitting with pillows behind shoulders.
   - This facilitates passage of the NG or OG tube into the stomach, decreasing the gag reflex, making swallowing easier and allowing passage of tube past the epiglottis into the stomach.
4. Cut strips of tape 1 ½ - 2" long.
5. Wash hands.
6. Don gloves.
7. Inspect both nares to determine which is more patent.
8. Measure the tube against the client to help ensure its proper placement into the stomach.
   a. Measure the distance from tip of nose to the ear.
   b. Measure the distance from the ear to the xyphoid process.
9. Ensure patency of the tube by flushing it with water. Check for rough edges. A stiff plastic tube can be made more pliant by immersing it in warm water.
10. Find the natural curve of the tube.
11. Lubricate 15-20 cm of distal end of tube with water-soluble lubricant.
12. Drape the patient. Provide emesis basis (Tube can activate the gag reflex). Provide tissues for excessive tearing.
13. **<u>NG Insertion:</u>** Using the more patent nare, insert tube through the nose, aiming down and back. When tube hits pharynx, have the patient flex his/her head forward and swallow. Advance tube as patient swallows. Continue to advance the tube until the marked position of the tube is reached.
    - If patient gags, coughs, or begins choking, withdraw slightly and stop insertion, allowing the patient to rest.
    - Do not force insertion.
    - Flexing the head of an unconscious patient will also facilitate tube placement.

      <u>OG Insertion:</u> Position curved edge of the tube downward inserting the tube into the oral cavity over the tongue. Continue as with NG insertion.
    - Have the patient take sips of water or mimic a swallowing motion to direct the tube toward the esophagus.
14. Unless placed by endoscopy or under fluoroscopy, obtain an X-ray to

confirm feeding tube placement.

- **This is the only reliable determination of accurate tube placement. X-Ray must be read and placement must be confirmed by the Radiologist and documented in the patient's medical record before administration of enteral feeding or medication administration.**
- **The MD must okay to start using the tube for feeding or medication administration, and document.**
- Mark the feeding tube with indelible ink at the exit site from the lip or naris at the time of the X-Ray. The nurse must confirm this mark each time, before feeding or administering medication through the feeding tube.

15. Secure the NG tube to the patient's nose and to the patient's gown, (10-21" from nose) with tape.
    - Maintains tube in correct position and prevents inadvertent dislodgement.
    - If the NG tube becomes dislodged or accidentally removed, Notify the MD prior to replacing the NG tube. If a new NG tube is inserted, confirm placement by X- Ray as per procedure above in #14.
16. Reposition and re-tape tube every 24-hours or when tape is soiled.
    - Monitor insertion site of tube for redness, swelling, drainage, bleeding or skin breakdown.
    - **Attach primary lumen to suction or gravity drainage if ordered.**

B. **<u>TUBE FEEDING:</u>**

1. Verify order for enteral feedings.
    - Order should include type of formula, volume to be delivered, and rate or length of infusion.
2. Check placement of NG, OG, or GT (the indelible ink mark, made after X-Ray confirmation, should be at the exit site from the lip or nares). If no ink mark present, make sure there is an X-Ray confirming placement, and mark the tube as per step A. (#14) above.
3. Wash hands and don gloves.
4. For initial feedings, assemble all equipment and supplies in a clean environment, such as the medication room. Wash enteral feeding cans prior to pouring into bag.
    - Pour entire contents of can. Do not save/refrigerate any portion of remaining feeding formula.
5. Elevate the head of the bed at least 30 degrees, 45 degrees is optimal.
    - Decrease risk of aspiration. If patient must be supine (e.g., because

of neck fracture), extreme caution must be exercised to monitor for aspiration.

6. Continuous Feedings: Close the clamp on the enteral feeding bag, and pour up to 8 hours of formula into the bag; or hang prepackaged closed system container of prescribed formula. Load administration set into enteral feeding pump.
   HANG NO MORE THAN 8 HOURS worth of feeding to prevent bacterial overgrowth in formula. Thus may lead to gastritis, nausea, vomiting and diarrhea.
7. Intermittent Feedings: Hang 100 to 480ml of formula in the bag at a time.
8. Hang bag on IV pole and prime tubing
9. Flush feeding tube with 30 to 50 ml of sterile water
10. Connect feeding bag administration set to distal end of feeding tube with safety tape.
11. Remove gloves and wash hands.
12. Begin Infusion:

    a. Feeding pump: set prescribed flow rate for continuous feeding.
    - Generally, tube feeding should be initiated at a rate of 25-30 ml/hour. If the patient tolerates this regimen, the rate can be increased by 15 ml/hour every 8 hours until goal rate is reached. Adaptation to an adequate volume of full strength formula should take no more than 3 days.

    b. Gravity feeding: adjust roller clamp to infuse formula via gravity over 30 to 60 minutes for intermittent feeding.
    c. Syringe method (Bolus Feeding): remove the plunger from a 60 ml syringe. Pour the enteral formula slowly, trying not to introduce the air.

13. Label enteral feeding bag and administration set with date and time hung and type and amount of formula. Change bag and administration set **every 24 hours for open system and every 48 hours for pre-prepared "closed" feeding system.**
    - Prevents bacterial overgrowth in set.
13. Administer mouth care every 2 hours.
14. Weigh patient daily.
15. Evaluate for Gastric Residuals of tube feeds.

C. APPROPRIATE CESSATION OF ENTERAL FEEDS

1. **RESIDUALS:**
   a. When feeding into the stomach: monitor every four (4) to six (6) hours for continuous feeding and before beginning every bolus or

intermittent feeding.

b. Hold tube feeds for gastric residual volume (GRV) greater than 250mL for one (1) hour. Notify a physician if GRV remains greater than 250mL for two (2) hours. If GRV remains elevated, consult a physician for addition of promotility agent.
c. To decrease likelihood of clogging, do **not** check residuals when feeding into the small bowel (post-pyloric).

* Only hold tube feeing during routine nursing care if HOB is below 45 degrees. If HOB can be maintained above 45 degrees, then do NOT hold feeds as this can lead unnecessary underfeeding. It is permissible to hold tube feeds for test or procedures as ordered by physician. Tube feeds MUST BE HELD for administration of Phenytoin. Stop feeds for one (1) hour before and one (1) hour after administration of Phenytoin.

D. <u>MEDICATION ADMINISTRATION:</u>

1. The Physician must write an order to "Change all PO medications to be administered via NGT." Refer to the list of Do Not Crush Medications on the Intranet.
2. Properly identify the patient.
3. Explain procedure to patient.
4. **Elevate the Head of Bed (HOB) at least 45 degrees**
5. Wash hands and don gloves.
6. To administer medications, stop feeding infusion.
   - If administering phenytoin, stop feeding one (1) hours before and one (1) hours after.
7. Confirm tube placement in stomach. (the indelible ink mark, made after X-Ray confirmation, should be at the exit site from the lip or nares).
8. Flush feeding tube with 15 ml of (sterile water).
   - Prevents clogging of tube and decreases GI upset.
9. Administer crushed tablets or liquid medications ONE AT A TIME. DO NOT MIX MEDICATIONS TOGETHER. Flush with 15 ml of purified (sterile water) AFTER EACH MEDICATION. Flush with 15 ml of purified (sterile water) after last medication. * if patient is on fluid restriction, consult with physician.
10. Resume feeding.
11. Do not add/mix medication into Enteral Feeds.

E. <u>DECLOGGING THE TUBE:</u>

1. Attach a 20 to 60 ml syringe to end of the enteral tube and aspirate as much fluid as possible.
2. Fill the syringe with 5 ml of warm (sterile water). Instill using manual

pressure for (1) one minute; use a back and forth motion with the plunger.
3. Clamp the tube for 5 to 15 minutes.
4. Try to aspirate or flush the tube.
5. If necessary, remove NG or OG tube. Insert new tube as ordered.
6. If patient has a GT and it remains clogged, report to physician.

F. REMOVAL OF NG or OG TUBES:

1. Explain procedure to patient.
2. Wash hands and don personal protective equipment.
3. Cover patient's chest with a towel.
4. Remove tape.
5. Using smooth, constant motion, with draw tube completely out of patient.
6. Wrap tube in towel.
7. Discard of tube in appropriate receptacle.
8. Provide oral or nasal care as needed.
9. Before removal of tiger tubes and nasal bridles, ensure that oral tolerance has been established.

DOCUMENTATION:

Patient Education Flow Sheet – Any patient and family education.

Progress Notes – Insertion of NG or OG tube, tube type and size, any difficulties in insertion, patient toleration, placement confirmation with X-Ray, appearance and volume of gastric secretions, oral care, tube site assessments, date and time of enteral feedings, strength and type of enteral feedings, tolerance of feedings, volume of residuals, unexpected outcomes and nursing interventions.

Medication Administration Sheet (MAR) - Date, time, medication, dosage, route, reason for giving medication and response of the patient.

Intake and Output sheet – Every eight (8) hours if on ward. Every twelve (12) hours in ICU/Stepdown Units.

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