BEEBE HEALTHCARE

Patient Care Manual

Enteral Tube Feeding	Date Issued: 06/01
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[ ] Condition of Participation [ ] Joint Commission Standard [ ] Department Specific Regulation	Reviewed:

PURPOSE

To provide guidance for nutrition related to tube feeding/enteral feedings.

SCOPE

All of Beebe Healthcare (Main Campus and Satellites).

POLICY

Nutrition is essential for promotion of optimal health and healing. Tube feeding may be required for patients who cannot take adequate nutrition by mouth normally due to:

- Moderate to Severe Dysphagia
- Oral or esophageal obstruction or injury
- Lethargic/unconscious state
- Intubation
- Some GI tract surgeries
- Oral intake on a consistent basis of less than 50% of estimated caloric needs

PROCEDURE

A. Tube feedings involve the delivery of a liquid feeding formula directly to the stomach, duodenum or jejunum.
    1. The physician will order which location based on identified patient needs.
B. Various tube feeding formulas may be administered through:
    1. Small bore feeding tube (Keofeed preferred). If inserting a small bore feeding tube with a stylet, it is required that an x-ray (KUB) be completed and confirmation of placement be documented prior to removal of stylet. Recommended by manufacturer that stylet is not reinserted.
    2. Nasogastric tube
    3. Gastrostomy or jejunostomy tube
    4. Percutaneous endoscopic gastrostomy or jejunostomy tube

5. Gastrostomy feeding button

C. The physician is encouraged to consult the RD for initiation or recommendations and Enteral Feeding orders in the patient's permanent medical record.

D. Tube feeding initiation nutrition referrals ordered after 3pm will be addressed by the RD the following day.

CONTRAINDICATED IN PATIENTS WHO HAVE A SUSPECTED INTESTINAL OBSTRUCTION

E. The nurse will:

1. Explain purpose and procedure to the patient and/or responsible person.

2. Position patient at the Fowler's to High Fowler's position (≥ 45•). Low Fowler's or Semi-Fowler's is not to be used.

3. Wash hands.

4. Check tube feeding formula with patient chart for:

a. Correct name of formula.

b. How the formula is stocked- ready to hang 1000 ml bottle vs. 8oz can vs. cans provided by patient or special ordered.

c. Expiration date on the formula

d. Temperature:

1. Must be room temperature

2. Cold formula increases risk of diarrhea.

3. Heating formula may cause it to curdle or change its chemical composition. Hot formula may injure the patient.

5. Obtain Ready-To-Hang container and appropriate safety screw connector feeding set.

IMPORTANT: Feeding set must be appropriate for the enteral pump being used.

6. Verify placement and patency of tube plus presence of and contraindications presence prior to initiating feeding.

7. **For <u>Ready-to-Hang Formula</u>: (Beebe enteral formulary only stocks 1liter RTH bottles for Tube feeding)**

a. Label Formula Bottle with:

1. Patient name

2. Room number

3. Date, time initiated, and time of expiration for formula and set (maximum of 24 hours)

4. Rate of administration

b. Also mark feeding set with start date and time

c. Turn container upside down and shake vigorously for 10 seconds

d. Holding the RTH container firmly, remove the dust cover from the Safety Screw Cap.

IMPORTANT: **<u>DO NOT</u>** remove the Safety Screw Cap itself from the RTH container.

e. Remove the dust cover from the Safety Screw connector set.

IMPORTANT: **DO NOT** touch any part of the Safety Screw connector that will come in to contact with the formula.

f. Insert the Safety Screw connector set into the port on the RTH Safety Screw Cap.

Push down on the Safety Screw connector until you feel the inner foil puncture.

g. Turn the Safety Screw connector clockwise until it is securely fastened.

IMPORTANT: TURN and TIGHTEN the Safety Screw connector to prevent spillage and contamination.

h. Close clamp on set, invert container and suspend, using hanging feature on bottom of container.

IMPORTANT: The RTH container must be hung in an inverted position for proper product flow.

i. Follow pump priming and operation directions provided with feeding set.

IMPORTANT: Proper setup is essential to assure accurate and effective pump functioning

j. Discard opened, unused formula within 24 hours.

k. Change all ancillary feeding supplies (flushing syringes, adapter covers, etc.) at least every 24 hours.

8. **For Formula available only in cans - clean off top of can with soap and water prior to opening product**.

a. Fill the top fill bag with no more than a 4-hour amount of formula to prevent bacterial growth.

b. Label bag with:

1) Patient name

2) Room number

3) Date, time initiated, and time of expiration of administration set (maximum of 24 hours)

4) Type of formula

5) Rate of administration

c. Also mark feeding set with start date and timed. Prime according to manufacturer instruction. This keeps air from entering the patient's stomach, which may cause discomfort, distention, vomiting and aspiration.

9. Initiate tube feeding:

a. If using pump, set rate ordered following manufacturer's instructions.

b. If using gavage bag or syringe, regulate flow using regulator clamp or height of syringe to deliver feeding over time frame ordered.

10. Assess Gastric Residual Volume (GRV) to determine patient tolerance of feeding (exception keofeed and jejunostomy tubes residuals cannot be checked):

a. Check residual a minimum of every 4 hours prior to adding formula to the bag.

Document in the patient's permanent medical record

1) Type of enteral tube

2) Tube feeding rate

3) Tube feeding type

4) Residual amount

5) Residual discarded

b. Re-install any aspirate obtained.

c. Prior to adding additional tube feeding to bag, flush bag and tubing with water until clear to prevent contamination.

d. Flush patient feeding tube with ordered volume of water.

e. IF GRV less than 250 ml

1) Replace residual

2) Flush tube with 30 ml water

3) Maintain TF rate if GOAL rate has been achieved (or if it was the 2nd GRV check)

4) Increase feeding rate every four hours, or as ordered, to goal rate.

f. IF GRV greater than 250 ml

1) Replace 250 ml residual and discard remainder (document as output) Flush tube with 30 ml water

2) Place pt. on RIGHT side for 15-20 minutes to promote gastric emptying. Recheck residual.

g. IF Second GRV greater than 250 ml

1) Stop feeding for one hour

2) Recheck residual.

h. IF Second Hour GRV greater than 250 ml

1) Replace 250 ml and discard remainder (document as output)

2) Stop feeding and NOTIFY PHYSICIAN to Consider Prokinetic agent.

11. Change administration set every 24 hours. This is done to prevent bacterial growth.
12. Monitor the patient and notify the physician of signs and symptoms of feeding intolerance:

a. Nausea

b. Vomiting

c. Abdominal distention

d. Shortness of breath

e. Severe diarrhea

f. Constipation

g. Frequent high GRV

13. Documentation of enteral tube in patient EMR containing the following:

a. Tube feeding Rate

b. Tube feeding type (formula name)

c. Tube activity

d. Enteral tube intake and output

e. Residual amount (drawn and discarded)

f. Flushes

14. Provide frequent oral hygiene to promote patient comfort.
15. Weigh the patient daily and document in the patient's permanent medical record.
16. Obtain and monitor blood tests related to nutritional status of patient as ordered by physician, and per Enteral Feeding Order Form.
17. Return any unused, unopened formula that has not been in the patient's room to the Nutritional Services Department to be redistributed.

F. Provision of tube feeding when supplies are limited

1. Limited will be as deemed by the Nutritional Services Leadership and/or their designee with input from the Materials Management Department.

2. When enteral pump supplies are deemed as limited, such as tube, bag and spike kits, these items change times will be increased from 24 hours to **up to 48 hours** as long as the system remains closed and ready to hang (RTH) bottles are not breached.
3. Upon the need to use enteral tubing and bag sets that are not used with a closed system (open gravity bags and syringes) please refer to the manufacturer's instructions. Open gravity bags should not hang more than 8 hours.

REFERENCES

ASPEN Safe Practices for Enteral Nutrition Therapy Task Force, American Society for Parenteral and Enteral Nutrition, Boullata, J.I., Carrera, A.L., Harvey, L., Escuro, A.A., Hudson, L., Mays, A., McGC.nis, C., Wessel, J.J., Bajpai, S., Beebe, M.L., KT.J.n, T.J., Klang, M.G., Lord, L., MartK., K., Pompeii-Wolfe, C., Sullivan, J., Wood, A., Malone, A. & Guenter, P. (2017). ASPEN Safe Practices for Enteral Nutrition Therapy Journal of Parenteral and Enteral Nutrition, 41(1), 15-103. doi:10.1177/0148607116673053

Enteral tube feeding, gastric. (2019, November 15). Lippincott Procedures. Retrieved from https://procedures.lww.com/lnp/view.do?pId=2263095&hits=tube,feedings,feed,tubes,feeding&a=true&ad=false

Nutrition Therapy in the Patient with COVID-19 Disease Requiring ICU Care, (April 1, 2020), SCCM, ASPEN https://www.nutritioncare.org/uploadedFiles/Documents/Guidelines_and_Clinical_Resources/Nutrition%20Therapy%20COVID-19_SCCM-ASPEN.pdf

Clinical Practice Guidelines for the Nursing Management of Percutaneous Endoscopic Gastrostomy and Jejunostomy (PEG/PEJ) in Adult Patients. Journal Wound Ostomy Continence Nurs. 2018;45(4):326-334. Published by Lippincott Williams & Wilkins. https://nursing.ceconnection.com/ovidfiles/00152192-201807000-00007.pdf