Policy and Procedure Template

XXX-000

SUBJECT: INSERTION OF TRANSPYLORIC (TP) FEEDING TUBE (DRAFT)	
ESTABLISHED: March, 2002	**LAST REVISED:** October 29, 2003

POLICY:

A registered nurse requires a written physician's order for insertion of a transpyloric (TP) feeding tube.

A physician is to insert TP tubes in the following patients unless otherwise ordered:
1) gastric ulceration
2) anterior basal skull fracture
3) nasal, pharyngeal, or facial anomalies, trauma or surgery
4) previous esophageal or gastric surgery (i.e. fundoplication, TEF)
5) altered gag or swallow reflex
6) coagulopathies

NOTE: The size of the TP tube is to be determined in consultation with medical staff. Registered nurses in critical care without previous TP tube insertion must be supervised by a critical care colleague (physician, fellow, or nurse) who have successfullyinserted two TP tubes in PICU.

PROCEDURE:

1) Identify patient. Check chart for physician's order

2) Assemble equipment:
   a) Medications (i.e. gastrointestinal stimulant, sedation) if ordered
   b) Select appropriate sized silastic TP tube for the patient (#6 Fr in children < 1 y.o.; #8 Fr in children > 1 y.o.).
   c) Flush with 10cc of sterile H_2O before insertion to dissolve internal tube lubricant.
   d) Water-based lubricating jelly
   e) 10 ml syringe
   f) Occlusive tape (e.g. Tegaderm, Opsite)
   g) Disposable gloves
   h) Stethoscope

3) Explain procedure to patient and family

4) Obtain assistance as needed

5) Wash hands. Put on disposable gloves

6) Place patient in supine position, keeping their head midline

7) If patient already has an NG tube in place, aspirate stomach contents until empty and clamp or cap tube.

8) Insure that wire can be removed from feeding tube and is not stuck to inside the silastic TP tube by withdrawing wire approx 10 cm. Reinsert wire ensuring that blue end fits snugly into silastic TP tube

9) Two distances measurements are required for tube length insertion. They need to be recorded and added together:

    - *Stomach distance.* Measure the distance (using the silastic tube as your measure) from the nares to the tragus, and then to the xiphoid process. This is the distance for gastric placement. Note length by the markings on the TP tube.
    - *Chest diameter measurement.* This is the distance from one side of the chest to the other. Measure chest diameter starting at the stomach distance marking. Place the stomach distance marking laterally at the mid-axilla position and measure across the xiphoid process with TP tube to mid-axilla on other side. Note length. This is your TP tube placing.
    - *Jejunum (transpyloric) measurement:* The combination of the stomach distance and the chest diameter measurement is your jejunum (transpyloric measurement).

10) Administer medications as ordered.

11) Lubricate the end of the tube and insert into nare. If able, ask the patient to swallow and bring chin to chest. The child's head should be tilted forward to help deflect the tube away from the trachea as the tube descends.

> **NOTE:** If the patient has a naso-gastric tube insitu; if possible, insert TP tube into same nares. It is suggested that it will be guided inot the esophagus by following the NGT track. If your patient is intubated there may be no option with regard to placement.

12) Advance tube to the first marked length. If resistance is met rotate tube slowly. Never force tube. Remove if patient has a persistent cough or shows signs of respiratory distress.

13) Positioning of the TP tube in the stomach should be suspected by the following:
    - attach a syringe to the end of the tube
    - flush the tube with 10 ml of air (5 ml with infants)
    - auscultation of air during insufflation over the LUQ of abdomen
    - easy re-aspiration of 5-10 ml insufflated air.

14) Insufflate with 10 ml air (5 ml in <1 y.o.) prior to advancing by 2 to 3 cm at a time. Aspirate after each advancement.

15) The tube is considered post-pyloric when 5-10 ml of air can be insufflated and only 2 ml aspirated. Continue step #15 until second mark reached.

> **NOTE:** Suspect tube kinking or coiling if undue resistance met, air not easily insufflated, or the tube backs out when released. Withdraw tube several centimetres and reattempt transpyloric insertion. May feel a subtle "give" as the tube is advanced through the pylorus.

16) Temporarily secure the tube with tape to the patient's ETT. Leave guide wire in until position confirmed by abdominal x-ray

17) Confirm placement with an abdominal x-ray. Once placement confirmed, remove guide wire (keep in a package at the bedside). If incorrect placement, pull back and reattempt if patient condition allows.

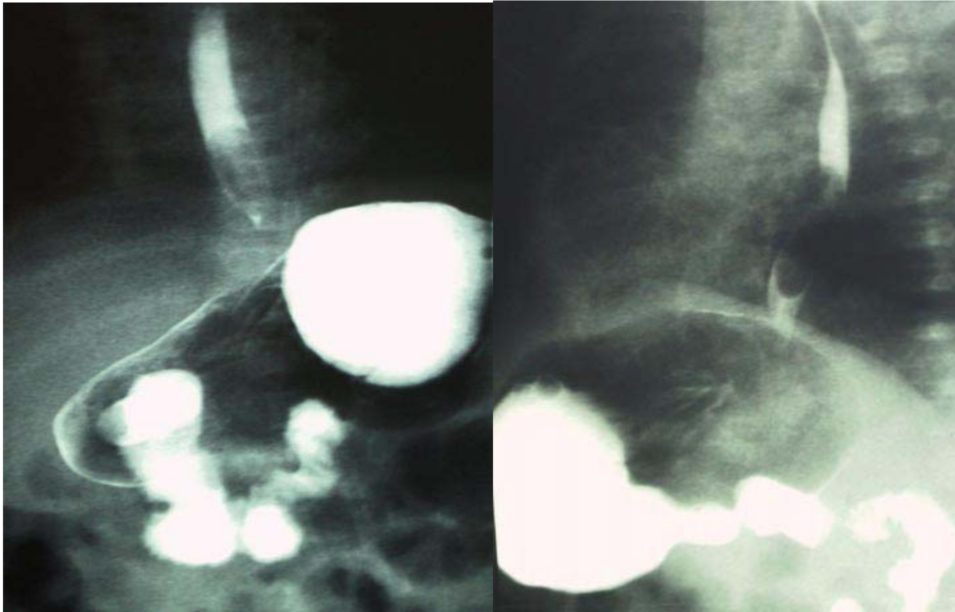
> **HINT:** If patient condition allows, applying upward pressure on abdomen may assist in achieving correct placement on second attempt. Ask physician for guidance and assistance

18) Once placement is confirmed, secure feeding tube with tape.

> **NOTE:** Silastic feeding tubes with guide wires are reusable. These tubes may remain in situ for up to three months. Never reinsert guide wire while tube is in the patient.

19) Mark tube position at nare with tape – record this distance.

20) Document procedure and correct tube position in the patient's health record:
    a) procedure and time
    b) record lot number
    c) type, size, and placement of tube
    d) confirmation of placement, and distance at nares
    e) patient's tolerance of procedure
    f) sign off at nursing station on Transpyloric Feeding Tube sheet the time and date that you inserted tube



Anterior projection barium swallow *Lateral projection barium swallow*

References

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