



## INSERTION OF DUODENAL FEEDING TUBE “10-10-10” PROTOCOL

### Description

A protocol involving the insertion of **all but 10 centimeters** of a small bowel feeding tube **10 minutes** after IV **metoclopramide (Reglan) 10 mg.** in order to obtain small bowel placement. Erythromycin may be an alternative for Reglan if adverse reactions to Reglan is a concern. Metoclopramide and Erythromycin cause gastric contractions and relaxation of the pyloric sphincter.

### Procedure

1. Obtain order for metoclopramide 10 mg. IV and administer over 1 to 2 minutes approximately 10 minutes prior to tube insertion.
2. The common adverse effects of Reglan includes dystonic reactions, restlessness, tremors, agitation, sedation. The serious but rare adverse effects includes arrhythmias (reversible) and neuroleptic malignant syndrome. Therefore, the patient should be closely monitored for the above reactions 30 minutes after the administration of the drug.
3. Erythromycin 500 mg. IV over 30 minutes may be indicated for patients where adverse reactions to Reglan are a concern. Wait an additional 30 minutes after Erythromycin has infused before placing tube.
4. Prepare to insert tube as per routine, including lubricating the tip. Elevating head of bed at least 30 degrees is recommended if possible. Measure the tube length from tip of patient’s nose to tip of earlobe to bottom of xiphoid process to estimate gastric placement.
5. Insert tube as per routine. If resistance is encountered, rotate tube slightly, **but never force.** Advance tube to pre-determined gastric region. At this point, auscultation and aspiration to confirm gastric placement is advised. Once placement is confirmed proceed to next step.
6. Insert all but 10 centimeters of tubing. Rotate tube slightly at any point resistance is met, **but never force.**  
**\*THE FARTHER THE TUBE IS INSERTED INTO THE SMALL BOWEL, THE LESS LIKELY THE TUBE WILL MIGRATE BACK INTO THE STOMACH, AND THE LESS REFLUX OF FORMULA WILL OCCUR.**
7. Tape the tube in position with the stylet still in place, and confirm tube location with KUB.
  - If tube is past the pyloric sphincter or in duodenum, administer 10 ml of H<sub>2</sub>O through the stylet connector and remove the stylet prior to initiating feedings.
  - If the tube tip is at the pylorus, with the rest of the tube appearing as a backward “C”, the tip will probably pass through the pylorus within 24 - 48 hours. You may wish to remove the stylet, as above, and initiate tube feedings at a slow rate. Repeat KUB next early AM.
  - If the tube is looped around within the stomach with the tube tip away from the pylorus, pull back the tube to the centimeter marking gastric placement. Administer another 10 mg. of Metoclopramide and reattempt tube advancement after 10 minutes.

### Maintenance

1. Make note of the centimeter mark and record in notes. Compare with the documented placement.
2. Obtain feeding residuals every 4 hours by aspirating slowly and with a 20 ml syringe. Flush the tube before and after residual checks with 15 ml H<sub>2</sub>O.  
High residuals may indicate tube tip migration back into the stomach, or distal bowel obstruction.
3. Flush tube before and after medication administration with at least 15 ml H<sub>2</sub>O. It is also recommended to administer all medications separately and flush with 5 ml H<sub>2</sub>O between each one.

**Never reinsert the stylet into the tube while located in the patient. This has the potential to perforate the tube as well as the patient’s esophagus.**