

Chapter 12

Placement And Administration of Medication Through The Gastric Tube

After attending to cardiopulmonary support, external cooling, and the administration of IV medications, a gastric tube--if possible--should be placed and antacid delivered to the stomach. Placement of the gastric tube should not be undertaken until after the airway has been secured (by endotracheal intubation or placement of an esophageal gastric tube airway (EGTA)) against the possibility of aspiration of stomach contents, or of medication, should gastric tube placement be incorrect.

The purpose of placing a gastric tube is to decompress the stomach of air and/or fluid, should it be necessary to do so, and to deliver antacid to the stomach to neutralize gastric hydrochloric acid which might result in ulceration of the gastric mucosa and subsequent hemorrhage.

:NOTE: *The gastric tube should not be passed through the EGTA if endotracheal intubation is to be attempted later. The EGTA gastric tube should only be used for this purpose when it is determined that the EGTA is to be left in place indefinitely.)*

Preparation For And Placement Of The Gastric Tube

Assemble the equipment required for the operation. This will include the Salem Sump gastric tube, a 50 cc or 60 cc piston-type catheter tip syringe, a tube or package of lubricating jelly, a cup in which to hold the medication, a 250 cc or larger bottle of Maalox or other appropriate antacid, and a stethoscope. The following procedure should be used to place the gastric tube and administer antacid medication:

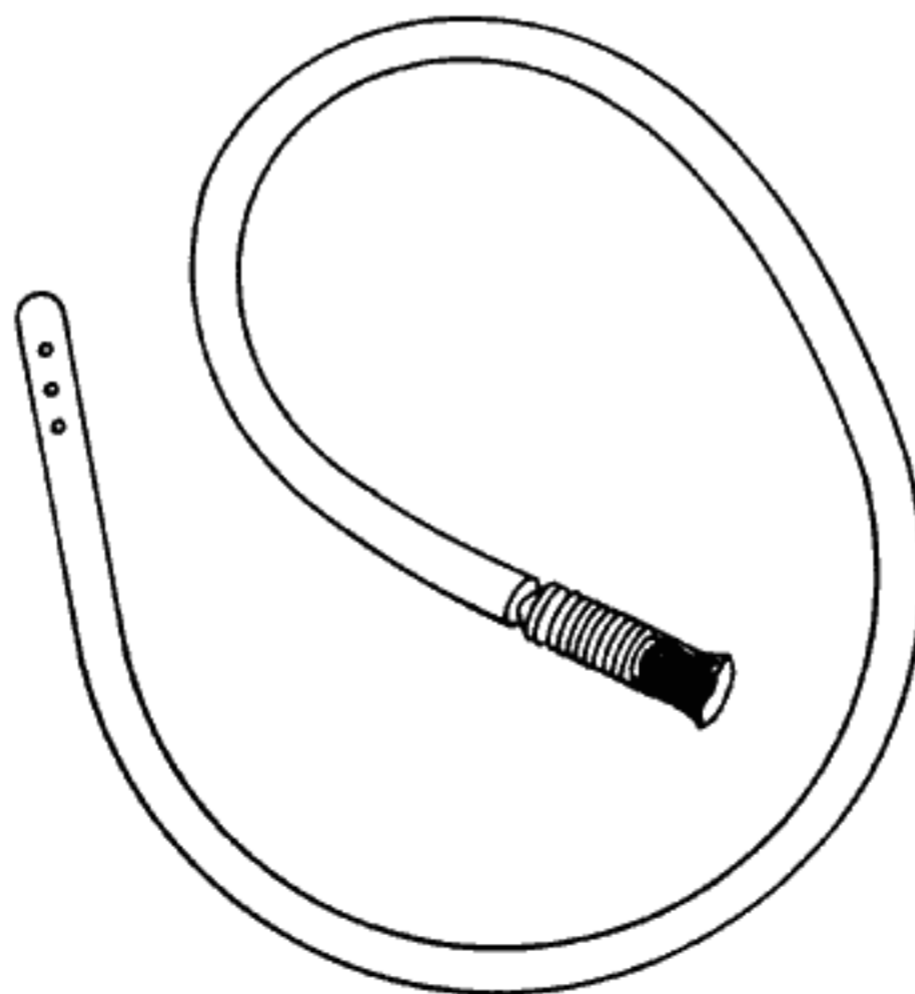


Figure 12-1: Gastric Tube.

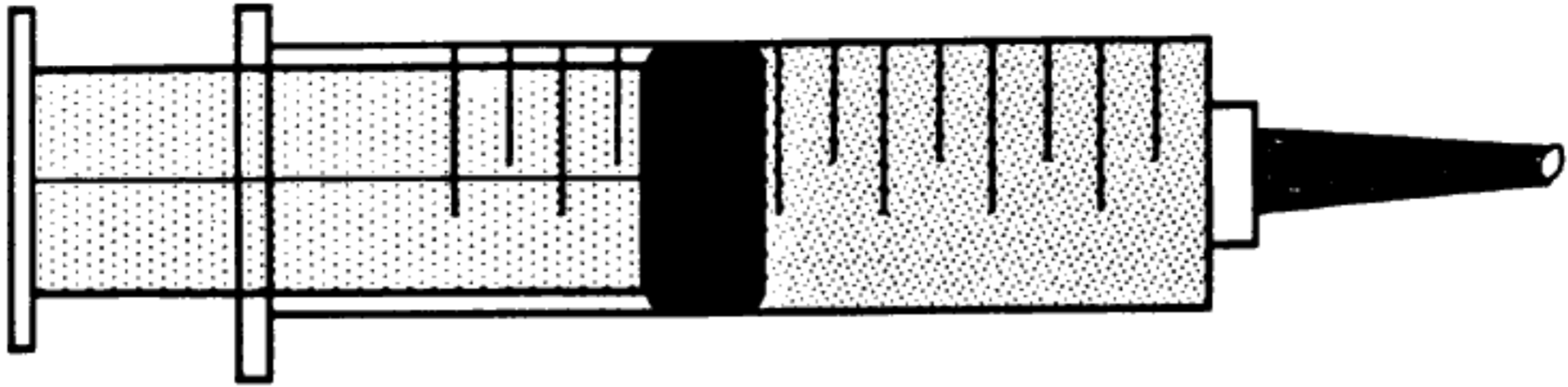


Figure 12-2: *Piston-Type Irrigating Syringe.*



Figure 12-3: *Tilting the head forward may facilitate passage of the gastric tube.*

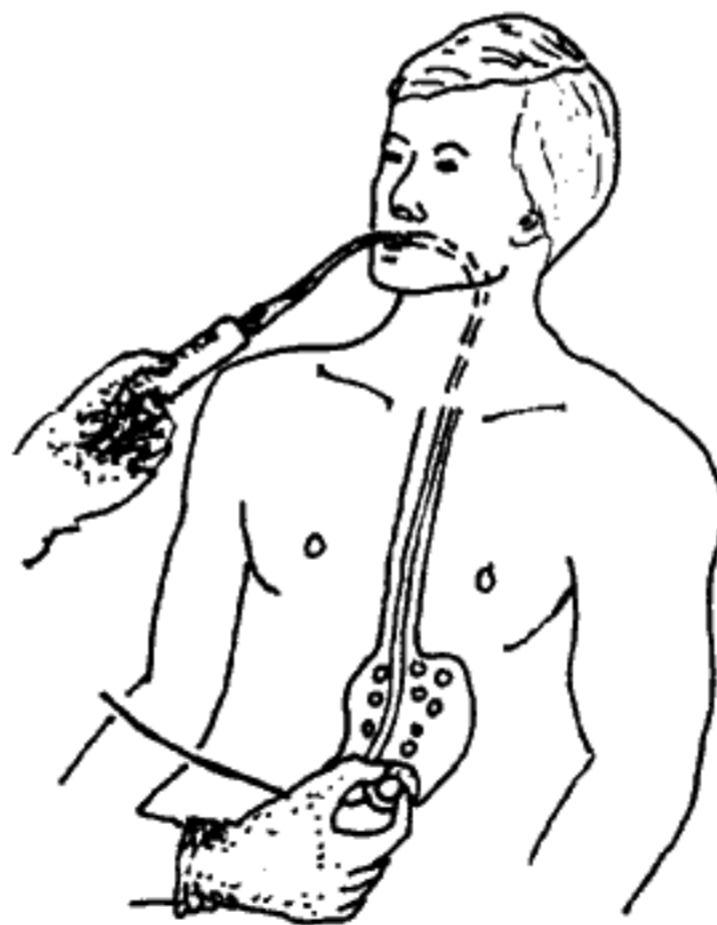


Figure 12-4: *Following placement of the gastric tube, inject 10 cc of air while auscultating the epigastric area to listen for gurgling or bubbles.*

- 1) Place the tip of the tube approximately 6 in. below the tip of the xiphoid process and extend the tube to the ear and then approximately parallel to the mouth. Mark the tube with a Sharpie indelible marker at that point. This provides an estimation of the distance the tube should be advanced in order to reach the stomach.
 - 2) Since passage of a gastric tube is a nonsterile procedure, the tube may be stiffened to facilitate its passage in the unconscious suspension patient by placing it in contact with the ice packs being used to externally cool the patient.
 - 3) Once the tube has stiffened from chilling, lubricate the tip with lubricating jelly. This may be done by squeezing the lubricating jelly onto a clean paper towel and coating several inches of the distal end of the tube with the lubricant. The tube may then be inserted by passing it blindly and rapidly (to avoid its warming and softening, and increasing the risk of kinking) through the mouth and down the pharynx (or down the obturator tube of the EGTA) until the pen mark is at or within an inch or so of the patient's mouth.
 - 4) Check tube placement by slowly injecting 10 cc of air with the irrigating syringe while auscultating the patient's epigastric area (the abdomen just below the xiphoid process). Listen for gurgling sounds; if they are heard, the tube is in the stomach. Next, attempt to withdraw some gastric contents by pulling back on the syringe. Withdrawal of gastric contents confirms tube placement.
- Failure to hear gastric gurgling or to withdraw stomach contents does not necessarily mean that the tube is incorrectly placed. In such a situation, antacid may be slowly given, providing the tube has been advanced smoothly to the desired depth and the airway is well protected by the EGTA or a cuffed endotracheal tube.
- 5) Secure the tube by taping it to the patient's face or to the gastric tube of the EGTA using a length of 1 in. adhesive tape. Further secure the tube by placing a 1 in. piece of adhesive tape, adhesive up, under the tube directly in back of where it was initially secured with tape. Place one end of the tape tightly and diagonally over the tube, and repeat with the other end crossing over the first. This secures the tube firmly and reduces the risk of removal in the event the tube is snagged or tractioned during transport. If an endotracheal tube is in place, *do not secure the gastric tube to the tracheal tube*. Tape the tube to the patient's face or nose.
 - 6) Clamp off the gastric tube with an Orange Clamp or hemostat.
 - 7) Resuspend the aluminum hydroxide and magnesium hydroxide in solution by shaking the bottle of Maalox or other antacid. Pour the antacid into a paper or plastic cup and draw up 50 cc to 60 cc of the medication with the syringe.
 - 8) Unclamp the gastric tube and slowly give the first 50 cc of antacid. Repeat this procedure until the full dose of 250 cc has been given.
 - 9) Flush the tube with 50 cc of tap water, or if unavailable, with 20 cc of air, to displace the antacid in the gastric tube.
 - 10) Reclamp the gastric tube and leave the syringe attached.