Nasogastric (NG) and Orogastric (OG) Tube
Gastric Distention

• Results from trapping of air in stomach
  • As stomach enlarges, pushes against diaphragm and interferes with lung expansion
  • Abdomen becomes more and more distended (especially in small children)
  • Resistance may be felt to bag mask ventilation
Gastric Distention

- Harmful effects of gastric distention during artificial ventilation
  - Increased risk of vomiting with subsequent aspiration and/or airway obstruction
  - The greatly distended stomach will prevent complete lung expansion
Gastric Distention Management

- Begins by slightly increasing bag mask ventilation inspiratory time
  - Large-volume suction should be readily available
  - If possible, patient should be placed in left lateral recumbent position
  - Manual pressure should be slowly applied to upper stomach or epigastric region
  - Gastric distention that cannot be managed with these techniques may require insertion of gastric tube
NG/OG Tube

• **Indications**
  - Gastric decompression in intubated patients
    - Consider OG/NG tube when using BVM or after endotracheal intubation

• **Contraindications**
  - Sinusitis
  - Esophageal varices
  - Recent nasal surgery
  - Maxillofacial trauma
Procedure

- Prepare patient
  - Place head in neutral position
  - Preoxygenate
  - Locate larger nostril
- Estimate insertion length by superimposing the tube over the body from the nose to ear to xiphoid process
Procedure

• Liberally lubricate the distal end of the tube and pass through the patient’s nostril along the floor of the nasal passage
• Do not orient the tip upward into the turbinates
  • This increases the difficulty of the insertion and may cause bleeding
• The use of a tongue depressor may be helpful during insertion
Procedure

• Continue to advance the tube gently until the measured distance is reached
• Confirm placement by injecting 20-50 cc of air with a Toomey Syringe (60 mL catheter-tip syringe) and auscultate for the swish or bubbling of the air over the epigastric region
  • May also note gastric contents in tube
• Secure the tube
Procedure

• Decompress the stomach of air and food either by connecting the tube to suction or manually aspirating with the large catheter-tip syringe, set suction to the lowest setting that will effectively decompress the patient’s stomach.

• Document the procedure, time, and result on the patient care report (PCR)
Procedure

• In the setting of an unconscious, intubated patient or a patient with facial trauma, oral insertion of the tube may be considered or preferred
  • Prepare patient and tube as described above for NG insertion
  • Introduce orogastric tube down midline of oropharynx and into stomach
  • Confirm placement
    • Secure orogastric tube as described above for NG insertion
Complications

• Whatever method is chosen, gastric decompression is uncomfortable for patient
  • May induce nausea and vomiting even when gag reflex is suppressed
  • Gastric tubes interfere with mask seals
  • Interfere with visualization of airway structures during intubation
Complications

- Nasal, esophageal or gastric trauma
- Tracheal placement
- Gastric tube obstruction
Credits