

# Nasogastric Tube Insertion

## Introduction:

It is used for evacuation of the stomach of gases and fluid for diagnostic and / or therapeutic purposes, or to deliver nutrients and medications.

## Indications:

- Acute gastric dilatation
- Gastric outlet obstruction
- Upper gastrointestinal bleeding
- Ileus
- Small bowel obstruction
- Enteral feeding

## Contraindications:

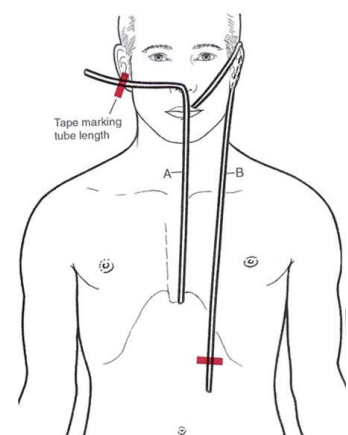
- Recent esophageal or gastric surgery
- Head trauma with possible basilar skull fracture

## Equipment:

- Sterile gloves
- NG tube
- Water-soluble lubricant
- Catheter-tip syringe (60 ml)
- Cup of ice (to stiffen it, facilitate passage)
- Stethoscope
- Adhesive tape for tube fixation

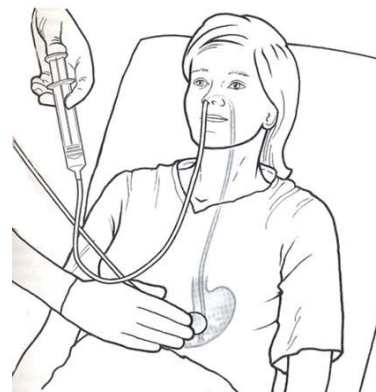
## Technique:

1. The co-operative patient is asked to sit upright.
2. For marks the distance, measure tube from mouth to earlobe and down to anterior abdomen so that last hole of the tube is below the xiphoid process. (usually 40 cm in adults)
3. Lubricate distal 15 cm of tube.
4. Ask patient to flex neck, and gently insert tube into a patent naris. Slide tube horizontally to avoid impingement on nasal turbinate.
5. Slide tube into nasopharynx, aiming posteriorly, as patient swallows. Once the tube has been swallowed, confirm that the patient can speak clearly and breathe without difficulty. Concurrently instill water through tube.



6. As they swallow, the tube is advanced down the esophagus towards the stomach.
7. Confirm correct placement into the stomach by injecting approximately 20ml of air with catheter-tip syringe while auscultating epigastric area, by characteristic bubbling sound.

8. Tape tube to nose.



### **Complications and Management:**

- **Nasotracheal intubation:**  
Withdraw tube, twist 180 degrees, reinsert. Keep patient's neck flexed. When possible, ensure swallowing during insertion.
- **Epistaxis:**  
Insert tube gently in horizontal plane. Inspect nose for patency. Lubricate tube well.
- **Esophageal erosion:**  
Remove tube, use soft tube.
- **Gastric bleeding:**  
Use Salem Sump to prevent excessive suction.
- **Nasal erosion:**  
Do not tape tube firmly against nasal ala.
- **Otitis media:**  
Remove tube as soon as possible, topical decongestants spray into nose to treat.
- **Excessive gagging:**  
Explain procedure to patient. Do not discuss nausea or vomiting. Encourage deep breathing through mouth after tube passes.
- **Aspiration:**  
Keep head of bed elevated. Use nasoduodenal tube instead of NG tube.

## Checklist for Nasogastric Tube Insertion

1. Checks patient's name and hospital number
2. Assembles correct equipment in the tray
3. Greets and introduces oneself to the patient
4. Explains procedure and gets verbal consent
5. Mentions hand washing and wears gloves
6. Marks distance on the tube
7. Sprays the nostril with Lidocaine and lubricates the end section of the tube
8. Asks the patient to sit on a chair or the edge of the bed with neck slightly flexed
9. Passes the tube along the floor of the nose into the nasopharynx
10. Asks the patient to swallow . Instills water through the tube concurrently
11. Advances the tube without forcing
12. Confirms correct placement in stomach
13. Tapes the tube to the nose
14. Thanks and listens to the patient's question
15. Removes gloves