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A Hartford HealthCare Partner

NGT Training for the Hospitalist

OBJECTIVES: The provider will be able to:

- Describe the indications for performing NGT placement
- Describe the contraindications for performing NGT placement
- Describe common complications associated with performing NGT placement
- Identify necessary equipment for performing NGT placement
- Demonstrate NGT placement and removal
- Verbalize post-NGT placement care and follow-up

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Indications

- Diagnostic and therapeutic applications
- Decompression of GI tract
  - Removing air, blood, ingested substances, and gastric contents
- Symptomatic relief
  - Severe pancreatitis
  - Ileus
- Delivery of medications, contrast die in dysphagic patient

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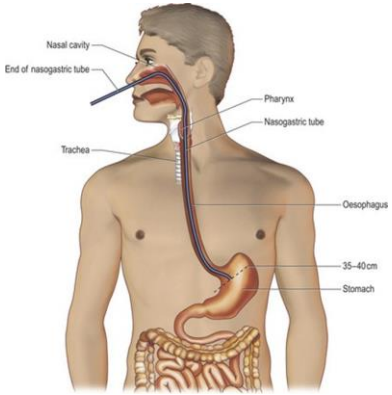
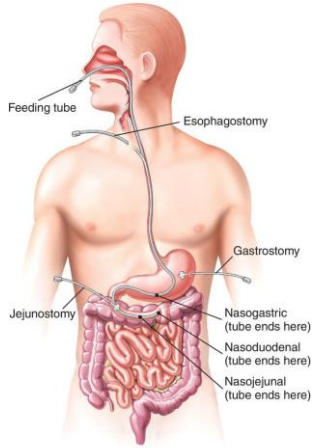
Nasogastric Tube (NGT) vs. Dobhoff Feeding Tube (DHT)





- NGT tube
  - Indications for use
    - Gastric decompression
    - Medication or contrast administration
    - Gastric feeding (usually in ICUs with patients who are intubated)
  - Cannot extend past the pylorus

- DHT feeding tube
  - Indications for use
    - For enteral feeding
    - Gastric or post pylorus feedings

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What is the difference between NGT vs DHT

- NGT
  - Generally easy to insert by trained inserter
    - Short learning curve
  - Can be done fairly quickly at bedside
  - Cost effective

- DHT
  - Requires special training
  - Placed using real-time visualization technology
    - Cortrak technology used by IV therapy team
  - Cost is 4 times higher then an NGT

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Salem Sump Tube

- Has 2 lumens
- #12-#18 French
- Air flows through vent lumen continuously
- Protects gastric mucosa by preventing vacuum from forming

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Contraindications

- Facial trauma or basilar skull fracture
- Esophageal Abnormalities
  - Ingestion of caustic substances
  - Esophageal strictures
  - Diverticula

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Complications

- Minor:
  - Sinusitis, epistaxis, sore throat
- Serious:
  - Esophageal perforation, aspiration, insertion into airway resulting in respiratory distress/failure, pneumothorax, and intracranial placement

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Equipment

- Gloves
- Protective gown
- Face shield
- Adhesive Tape
- Emesis basin/towel to drape on patient chest
- Glass of water with straw
- Wall suction, set to low intermittent suction
- Suction tubing and container
- Stethoscope
- Catheter tip syringe (Toomey syringe)
- Tissues
- Disposable pad & gloves
- Tongue blade
- Normal saline solution (for irrigation only)

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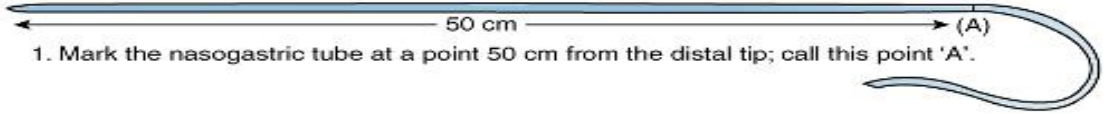
Insertion Length

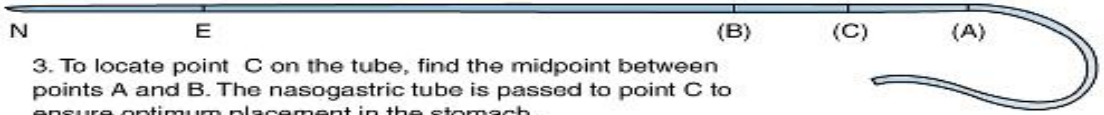


1. Mark the nasogastric tube at a point 50 cm from the distal tip; call this point 'A'.

Measuring distance from nostril to tip of earlobe.

Measuring distance from earlobe to tip of xiphoid process.

2. Have the patient sit in a neutral position with head facing forward. Place the distal tip of the tubing at the tip of the patient's nose (N); extend tube to the tragus (tip) of the ear (E), and then extend the tube straight down to the tip of the xiphoid (X). Mark this point 'B' on the tubing.

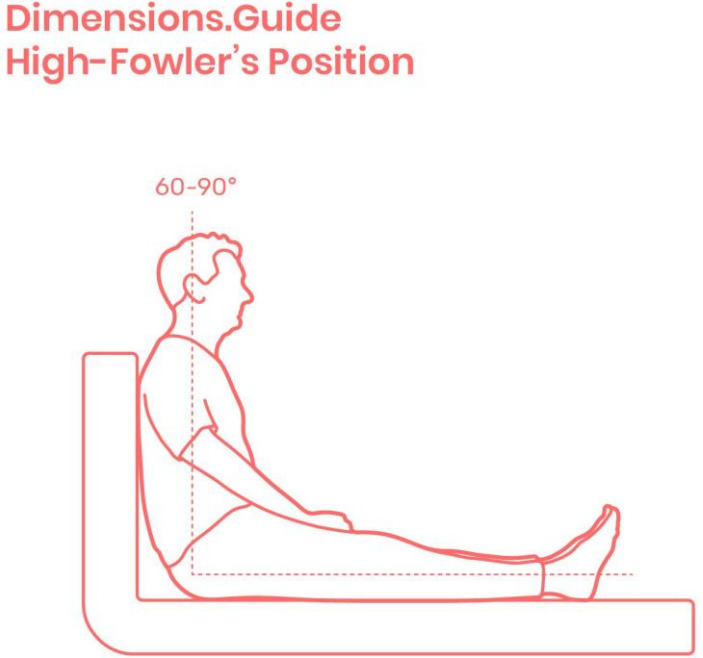


3. To locate point C on the tube, find the midpoint between points A and B. The nasogastric tube is passed to point C to ensure optimum placement in the stomach.

Figure 36-3 Measuring length of nasogastric tube for placement into stomach.

Assessment & Preparation

- Presence of gag reflex
- Mental status or ability to cooperate with procedure
- Explain procedure to patient and why indicated
- Assist the patient to high Fowler's position
  - head of the bed needs to be elevated as **high** as possible. The upper half of the patient's body is between 60 degrees and 90 degrees in relation to the lower half of their body.



- Drape chest with disposable pad/towel

Assess the client nares

- Ask client to hyperextend the head
- Observe (intactness of nostril tissue including any irritation or abrasion)
- Examine the patient’s nostril for symmetry. To determine which nostril is more patent, ask the patient to occlude each nostril and breathe through the other

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Insertion

- Place patient in sitting upright position in sniffing position with neck flexed and head extended
- **Slowly advance lubricated tube in downward and backward direction when client swallows**
- **Stop when client breathes**
- If gagging and coughing persist, check placement of tube
- Once in nasopharynx instruct pt to bring chin to his/her chest
- Unless contraindicated, offer the patient sip(s) of water through a straw. Keep advancing tube until tape marking is reached
- Do not use force, rotate tube if resistance is met
- Discontinue procedure and remove tube if there are signs of distress, such as gasping, coughing, cyanosis, and inability to speak

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Confirming NGT placement

- Initially, an x-ray should be ordered to confirm placement
- Verify NG or Salem Sump tubes by auscultation of an injected air bolus over the epigastrium or aspirate stomach contents
- Measurement of tube length, visual inspection and measuring of the aspirate pH is also recommended

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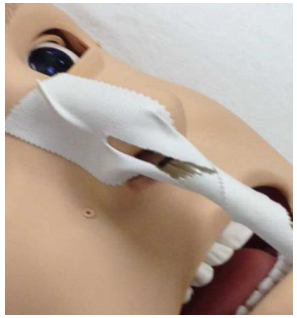
NGT: Securing

- Once position is verified, mark tube at naris
- Apply skin prep to nose
- Split lower portion of tape and apply upper portion to nose. Wrap split ends around tube in a spiral fashion. Avoid pressure against naris
- Assess skin at naris daily for redness or breakdown
- If unable to visualize the naris, change tape



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Post Procedural Care

- Ensure that the NG tube is functioning properly
- NGTs are ineffective when they are not patent. To ensure the patency, disconnect the tube from the suction device
- Using a large syringe, inject 20 to 30 mL of air through the NG tube. Free flow of air through the tube indicates that the tube is functioning properly
- Assess the nares and nasopharynx to ensure that no pressure ulcer or tissue necrosis is occurring from irritation or pressure from the NG tube
- Remove the NG tube as soon as it is no longer needed or indicated.

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Documentation

- Tube size
- Drainage or aspirate (residuals) amount, color and consistency
- Suction- type and level (i.e. low intermittent)
- Patient tolerance
- Verification

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NGT Removal Equipment

- Gloves
- Catheter
- Saline bottle
- Towel
- Facial tissues

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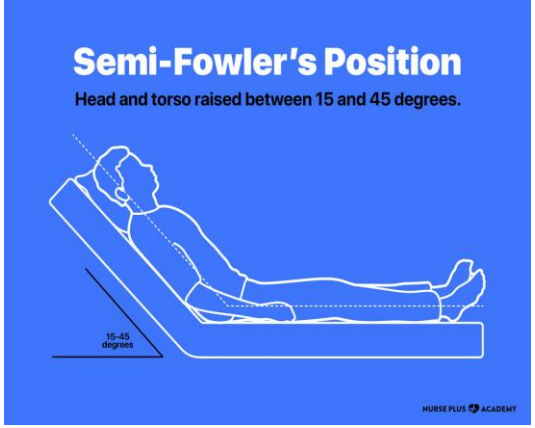
NGT Removal Procedure



- Explain procedure to the patient
- Assess bowel function: peristalsis or flatus
- Place pt in semi-fowler's position
- Drape towel across patient chest
- Using the syringe, flush the tube with 10ml of saline to ensure the tube does not contain gastric contents
- Untape the tube
- Clamp the tube by folding it in your hand
- Ask the patient to hold his/her breath to close epiglottis
- Withdraw the tube gently
- Assist patient with mouth and nasal care
- Document tube removal and patient tolerance

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Reference

- Nasogastric Intubation. (2006). *New England Journal of Medicine, 354*(17).
- https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.dimensions.com%2Felement%2Fhigh-fowlers-upright-position&psig=AOvVaw2m-7j9bEOXcXecYfWkYYll&ust=1622125981797000&source=images&cd=vfe&ved=0CAIQjRxqFwoTCMjKkqvI5_ACFQAAAAAdAAAAABAD
- https://s.nurse.plus/wp-content/uploads/2020/06/Semi-Fowlers-position.jpg

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