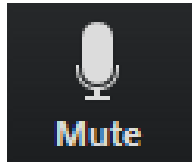


# Nursing Care of a Child with a Nasogastric Tube

2022

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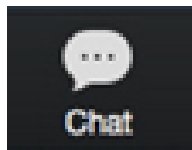
# Webinar Guidelines



Use mute when you are not speaking. Unmute anytime to ask questions.



Turn video on for a more personalized/engaging experience. If internet connection is low turn on when speaking.



Use chat for additional comments/questions you'd like to share. Raise virtual hand to ask questions.



Tell us about yourself

# Objectives

1. Review types of NG tubes used in paediatrics
2. Discuss nursing care of a child requiring an NG tube
3. Review common problems and troubleshooting strategies with NG tubes
4. Discuss considerations for sending a child home with an NG tube

# Types of NG Tubes

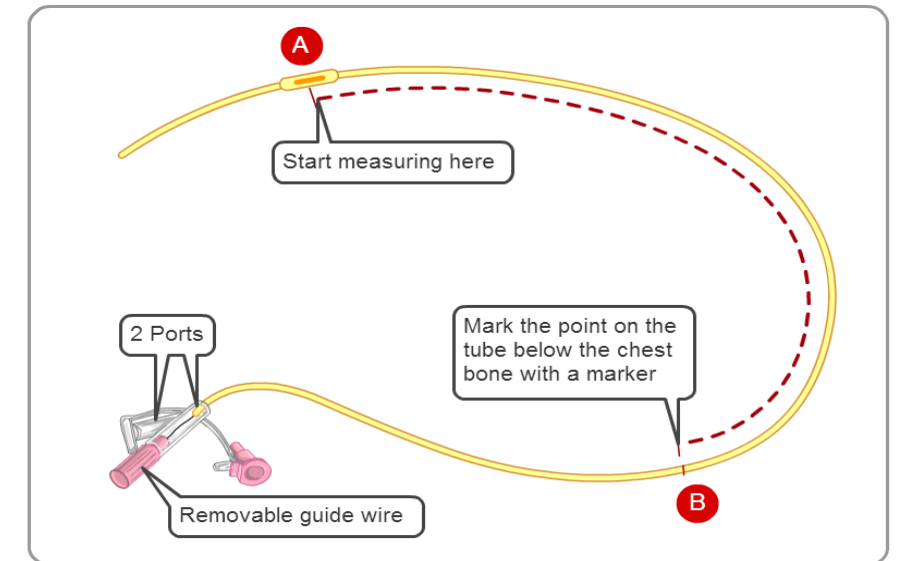
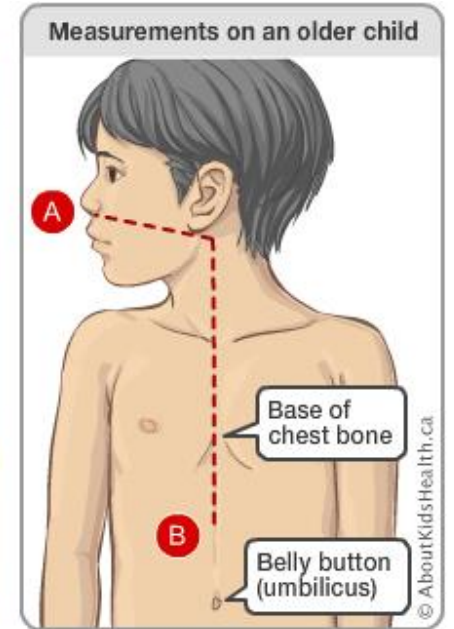
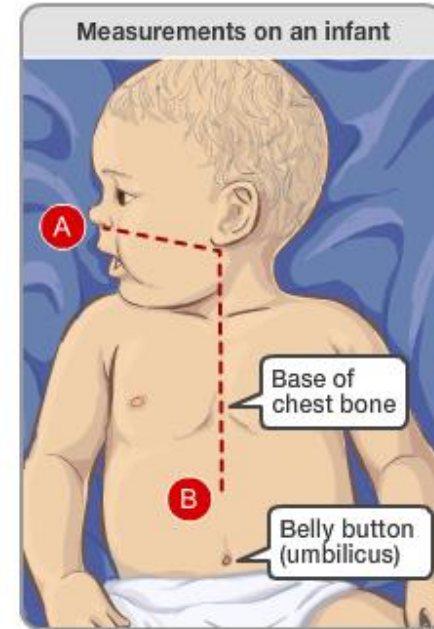


- PVC plastic tubes
  - Used short term
  - Stiffer, radiopaque
  - Drainage, gastric decompression, feeding
- Silastic/polyurethane tubes
  - Used longer term
  - Soft, flexible material
  - May include guidewire to help with insertion
  - Weighted tip that is radiopaque

What types of NG tubes are used in your organization?

# NG Insertion – Preparation

- Measure correct length; ensure infant/child is facing forward
- Positioning for infant vs child
- Engage caregivers with comfort positions
- May require more than one person to insert
- Ensure all supplies needed to secure and verify placement are close by



# Inserting the NG tube

- Children may drink water through a straw (unless NPO) and infants can suck on a soother to help advance the tube
- Advance the tube slightly down and towards the ear on that side. Do not force the tube
- Continue to advance tube to the marked measurement and secure with tape
- Accidental placement in the trachea may occur. Infant/child may choke, cough and show signs of respiratory distress
  - Remove tube immediately
  - Let infant/child rest and try again





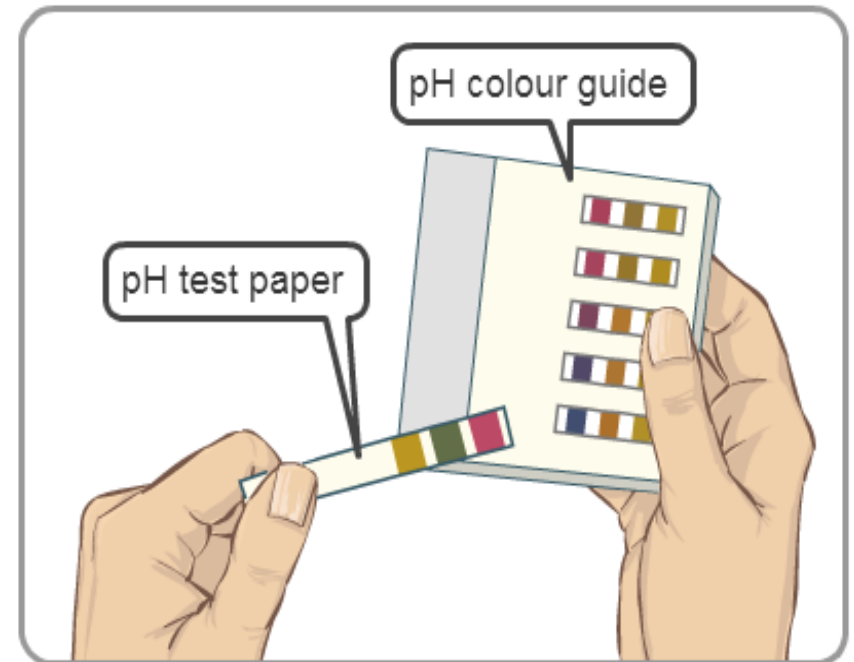
# Verifying NG Tube Placement

## When?

- a new tube is put in
- before every feed/medication
- you are concerned that the tube may have come out
- child is choking, vomiting, coughing or having trouble breathing

## How?

- pH testing of gastric aspirate
- Only auscultating pop is not a reliable method of verifying NG placement
- X-ray may be another option, but should limit the number of times this is done if placement can be verified with gastric aspirate



# Troubleshooting NG Tube Placement

- pH >6: consider the reasons that may impact gastric acidity:
  - Acid suppressing medications (i.e. omeprazole)
  - Recent feeding (continuous feeds or recent oral intake)
- Aspirate can be examined for appearance of normal gastric contents to support decision making
- In hospital, x-ray may be an option to verify placement
- If in doubt, take it out

		Clear - brown, blood tinged, mucousy			Light brown, mucousy
		Cloudy, mucous, white tan			Partially digested formula
		Clear, light grassy green with sediments			Undigested formula

# Nursing Care of NG Tubes

- Assess skin integrity on face and around nares. Replace tape as needed
- Assess patency of nares if patient has secretions. Tip suction as needed
- Change tube at recommended frequency based on type of tube. If possible alternate nares with each change
- Flush tube after every feed and medication to prevent blockage

# Safety and Monitoring

- Position of infant/child during feeds
- Consider level of observation required during feeds (e.g. infant vs child vs teenager, gag reflex, neurodevelopmental delay)
- Risk for entanglement and strangulation
- Oral stimulation during feeds (e.g. OT may provide guidance)
- Social environment during feeds (e.g. sitting at the table during meal times with others)

# Blocked NG Tubes

- **Use warm water**

- Flush the tube with 1 mL of warm water.
- Using a pulsating push-and-pull motion, insert as much water into the tube as possible. You may have to try this a few times to unblock the tube.
- When the tube is no longer blocked, flush with at least 5 mL of warm water.

- **Remove the tube**

**Prevention is key! Flush tube well and ensure meds are formulated for use with enteral tubes**

# Enteral Feeding Through an NG Tube

- Types of tube feeds:
  - Bolus
  - Continuous
- Feeding bags & syringes are changed as per your organization's PPG
- Mode of delivery:
  - Gravity
  - Pump
  - Syringe
- Hang times vary depending on type of formula



How are NG feeds delivered at your organization?



# Case Study: Ruhan

You are caring for Ruhan, a 3 month-old with Trisomy 21 and a complex cardiac history. He relies on an NG tube for top ups of formula, as he tires quickly with PO feeding. He is not on any medications.

You are setting up his NG feed and are unable to aspirate from Ruhan's NG tube to check the placement and nothing is coming out of the tube.

**What are your next steps?**



# Case Study: Ruhan

Mom gives Ruhan 20ml of formula safely by mouth. You attempt to aspirate from the tube again and easily withdraw 2ml of aspirate that looks like fresh formula.

You check the aspirate, and get a pH reading of 7.5





# Preparing for Discharge

- Criteria for discharge home with NG feeds as per your organization, but may include:
  - Medical readiness
  - Family readiness
  - Established feeding/treatment plan
  - Home care support (if applicable)
  - Post discharge follow up
- Family caregiver education
- Equipment, supplies, funding resources

# Considerations for Home

Mode of  
delivery

Frequency of  
bag changes

Type of water  
for flushes

Safety  
considerations

Equipment  
and supplies

Referral to  
HCCSS



Online evaluation form will be sent after the session or scan the QR Code to complete now.

We appreciate your feedback.

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