Best Nursing Practice in the School Environment, Part 2

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Objectives

1. Demonstrate administration of tube feeding
2. Demonstrate medication administration via a gastrostomy tube
3. Explain clean urinary catheterization
4. Discuss suprapubic catheters
5. Discuss the Vagus Nerve Stimulator
6. Discuss ITB (Intrathecal Baclofen Therapy)

Gastrostomy Tube Feedings and Medications

Basic Principles

1. Assess tube placement – aspirate gastric contents: pH of 1 – 4. Markings on gastrostomy tube - “Graduation marks”; compare before each feeding to see if tube has moved. (No markings with Mic-key)
2. *Assess gastric residual – if greater than 50% of the amount being fed, hold and recheck in 1 hr. May need to notify physician. Are bowel sounds present? Put back anything aspirated out of the stomach.
3. Assess site for redness, swelling, pain. May or may not have a dressing.
4. If ordered

Gastrostomy Medication Administration

After assessing gastrostomy site, prepare for administration of medications or feeding.

1. Gather supplies
2. Have student sitting with head elevated >30-45°
3. Flush tube with water, then administer liquid medication. Flush between each medication and after the last medication. (This helps maintain patency of the feeding tube.)
4. Feedings and medications should be at room temperature when administered.

Intermittent or Bolus Feeding

1. Remove plunger from syringe & attach barrel of syringe to end of tube – 60 mL syringe with catheter tip
2. Fill syringe with amount of formula. Elevate syringe to no more than 18 inches above insertion site, and allow it to empty gradually by gravity. Keep solution in syringe at all times. Add 30 – 60 mL of water at the end. Avoid getting air into the stomach.
3. If a feeding bag is used, prime tubing and attach tubing to end of feeding tube. Set rate by adjusting roller clamp on tubing or placing on a feeding pump. Change bag every 24 hours.
4. Student should remain upright for 30 min after feeding
The Vagus Nerve Stimulator

- Implanted device (usually left chest)
- Send an electrical impulse to brain via the vagus nerve
- Occurs every 5 minutes for 30-60 seconds
- For patients with uncontrolled seizures who have failed other therapies
- Magnet activation to abort or decrease intensity or length of seizure if needed

Vagus Nerve Stimulator Magnet

How to use the stimulator magnet:
Place the magnet over the system for a count of 3 seconds then remove.
Wait 60-90 seconds before using the magnet again.
Number of times it can be used per seizure varies.
Move on to next seizure plan intervention - meds?
When to call 911 should be in seizure plan of child
Magnet should be with the child at all times.

Intermittent Catheterization

The insurance companies are driving the method or type of catheter to be used: clean vs. sterile catheters

Procedure for Urinary Catheterization (clean technique)

1. Wash hands
2. Apply clean gloves for nurse, optional for student.
3. Wash perineal area appropriately
   - For male: Grasp penis and hold at 90° angle; if foreskin present retract. Using sanitary wipes, first wipe the tip of the penis, then move outward. 3 wipes should be used.
   - For female: Using sanitary wipes, clean inner labia (Rt & Lf) each separate, then clean down the center using 2 more wipes.
4. Lubricate catheter and insert into urinary meatus until urine starts flowing
5. Collect urine until drainage stops
6. Throw away urinary catheter OR if reused clean and store

Procedure for Urinary Catheter Cleaning

If catheter is reused, follow these cleaning steps.
   a. Clean catheter with soap and water
   b. Forcefully rinse the catheter lumen with tap H2O
   c. Allow catheter to air dry
   d. Store in a container
   e. Plastic catheters should be thrown away when the plastic looks cloudy. This is about once a week.

Suprapubic Catheters

- Urine usually drains into a collection bag
- Supplies at school
- Extra catheter
- Extra collection device if possible
- If catheter comes out:
  - Lubricate new catheter
  - Slide into stoma
  - Inflate balloon
  - Reconnect to drainage system
Suprapubic Catheters

Bladder program
- Catheter clamped (not connected to drainage device)
- Periodically unclamp and drain to empty bladder
- May need a urinal to catch bladder contents
- May need extra set of clothes at school
- Older children may do this by themselves
- May need more privacy such as the health room restroom
- Younger children may need assistance

IBT - Intrathecal Baclofen Therapy

- Baclofen is an antispasmodic drug
- Can be taken orally or administered intrathecally
- Helps control spastic diplegia (Cerebral palsy for example)
- Intrathecal administration gives a more consistent delivery
- Orally, is taken several times a day

Intrathecal Baclofen Pumps

- Implanted pump (usually abdomen)
- Catheter is threaded into spinal column to delivery med into fluid
- Delivers small quantities of baclofen continuously
- Helps diminish spasticity and rigidity
- Programmable externally
- Complications:
  - Infection
  - Overdose of medication

References


ICnca.ca/PD1488Intrax:Impl:CatheterCathbook.pdf
Baclofen Pump Implants (Intrathecal). Vagus Nerve Stimulation: School of Medicine – Department of Neurological Surgery.
Information on the Vagus Nerve Stimulation (VNS) for Schools – Medical University of South Carolina, www.muschealth.com/epilepsy.