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EDUCATION COMMITTEE PUBLICATION: APP Resources

Rectal Irrigations

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Rectal tube decompression and rectal irrigations are used to treat infants and children with Hirschsprung disease, constipation, colitis, intestinal/abdominal distension and those needing bowel clean outs. Rectal tubes can also be a helpful diagnostic tool in neonates who are being surgically evaluated for failure to pass meconium. Rectal tubes, different from rectal retention enemas, are placed transanally allow for passage of stool and flatus, which decreases abdominal and intestinal distension. Rectal irrigations prevent stool and gas from building up in the colon, which is an important way to prevent and treat enterocolitis. When performing a rectal irrigation, the end goal should be clear output and a soft, non-distended abdomen. Therefore, the volume needed to perform a successful irrigation can be varied. Ideally, more output than saline instilled will occur.

This resource sheet will provide a reference for the supplies needed and how to perform a rectal irrigation. There are links for video demonstrations listed below.

Supplies

1. Rectal Tube (Foley catheter or “red rubber” catheter)
    - Size Selection (size recommendations may vary based on institution):
        - Patients less than one year of age: 16-20 French
        - Patients greater than one year of age: 24 French
    - Patients with an anorectal malformation may require provider discretion with tube size selection.
    - It is not recommended to cut additional holes in the rectal tube as this can cause the catheter to fold on itself and not allow irrigation to be instilled far into the GI tract (will not reach most distal holes).
2. Water soluble lubricant
3. Normal saline
4. Catheter tipped syringe (60 mL)
5. Two clean basins

Procedure

<u>Rectal Tube Insertion</u>

1. Ensure you have comfort and/or distraction techniques for the infant or child as needed.
2. Position the infant or child on their back with their knees back and pulled up towards their chest. For larger infants or children, their knees can be bent with their feet flat on the surface. Assistance may be required to help hold the infant or child in position.

3. Lubricate the tip of the rectal tube using the water-soluble lubricant and gently insert the rectal tube 4-6 inches.
4. The rectal tube tip should be directed towards the umbilicus while inserting. If any resistance is met, do not force the rectal tube. You may try changing the direction of the tube, pulling the tube in and out, or twisting the tube to help ease resistance.
5. Allow any gas or stool to pass through the rectal tube into the empty basin.

Rectal Irrigation

1. Goal irrigation volume: 10-20ml/kg
    - Depending on goal of treatment, irrigation volume may be broken up into smaller instilling volumes.
    - For HAEC, may require more volume until output is clear
    - Consider warm saline!
2. Connect syringe to the rectal tube and gently instill saline into the rectal tube.
3. Remove the syringe and allow the stool and solution drain through the tube and into the basin.
4. Repeat the irrigation, advancing the catheter 2-3 inches with each syringe of saline solution instilled.
    - Ultimately, the entire catheter, up to the “Y” of the Foley catheter or widened portion of the red rubber catheter should be inserted for all ages and sizes of patients.
5. Allow the rectal tube to drain fully between irrigations.
    - Gentle massage of the patient’s abdomen can be performed to encourage complete drainage.
6. Continue irrigations until the stool is clear and abdomen is soft.
7. Record and document input and output for the procedure.
8. If performing intermittent rectal irrigations (example: every 6 hours), remove the rectal tube in between irrigations. If the tube is to remain in place for decompression, the rectal tube can be taped to the buttock and the end connected to a diaper or drainage system.
9. The number of irrigations needed per day will be dependent on the clinical status of the patient.

Trouble Shooting

Meeting resistance?

- Do not force the tube.
- Gently pulling the tube in and out or twisting the tube to help change direction.
- May need a size larger or smaller to bypass a stool ball or navigate a redundant colon.
- May be necessary to abort the procedure and discuss with the surgeon or another team member.

Output does not equal amount instilled?

- Gently pull the rectal tube in and out while twisting. If fluid still does not return: see below bullet points.

- The tube may be clogged. Fully remove the tube and inject normal saline to clear out the tube. Once normal saline is freely flowing through the tube, it can be reinserted.
- Position the infant or child so the head of the bed is elevated to encourage gravity to support drainage.
- Gently massage of the patient's abdomen (following the direction of the colon) to encourage complete drainage.

Patient not tolerating procedure?

- If the patient is experiencing pain out of proportion to the procedure, syncope, vomiting or bloody stools, discontinue the irrigation.

Parent Teaching Videos (Great for Provider Review Too!)

1. Boston Children's Hospital: Colorectal and Pelvic Malformation Center. How to give your child rectal irrigations. https://www.youtube.com/watch?v=qhSODUKFEx8

2. Children's Hospital Colorado: Colorectal and Urogenital Care. https://www.childrenscolorado.org/conditions-and-advice/conditions-and-symptoms/conditions/hirschsprung-disease/

3. Children's Mercy Kansas City. Hirschsprung Disease in Children. https://www.childrensmercy.org/departments-and-clinics/colorectal-center/hirschsprung-disease/

References

1. Children's Wisconsin. Rectal Tube Insertion and Irrigation. *Children's Hospital and Health System Patient Care Policy and Procedure*. 2023.
2. Corman, ML, ed. *Corman's Colon and Rectal Surgery.* Sixth edition. Lippincott Williams & Wilkins, a Walters Kluwer business; 2013.
3. Browne NT. Nursing Care of the Pediatric Surgical Patient. Third edition. Jones & Bartlett Learning; 2013.
4. *Lippincott Nursing Procedures*. Eighth Edition. Wolters Kluwer; 2019.
5. Marty TL., Seo, T, Sullivan, JJ, Matlak ME, Black, RE, Johnson DG. Rectal Irrigations for the Prevention of Postoperative Enterocolitis in Hirschsprung's Disease. *Journal of Pediatric Surgery*. 1995; *30(5),* 652-654.