

PROTOCOL FOR COLONIC IRRIGATIONS

RATIONALE: Patients with Hirschsprung's Disease may suffer from enterocolitis, either before or after corrective surgery. They have an underlying dysmotility of the colon which leads to stasis of their stool, subsequent bacterial overgrowth and then secretory diarrhea. Sometimes the enterocolitis gives less dramatic symptoms such as failure to thrive and intermittent cramping and abdominal pain.

The treatment of enterocolitis when it is severe enough to warrant inpatient care involves aggressive colonic irrigations, intravenous antibiotics (Metronidazole) and intravenous hydration.

The rationale of rectal irrigations is to clean the colon of stool to prevent "stasis" of stool in the colon. Your child should be irrigated with normal saline solution beginning with 10-20ml at a time for a total of 20ml/kg. If the saline is returned during the irrigation process, then this volume can be repeated.

Supplies needed:

- Silicone foley catheter *16fr for children under one year of age
- * 24fr for children over one year of age
- 60ml catheter tip syringe
- Lubrication, such as surgilube or KY jelly (nothing petroleum based)
- 2 unsterile basins such as emesis basins

*This is based on child size, parents may have to purchase sizes between 16fr and 24fr based on anus size and integrity of the rectum.

**The lumen size of these catheters are larger to allow passing of thick stool through the catheter.

To begin :

Pour your normal saline solution into a non-sterile basin (emesis basin)

Using a 60 ml catheter tip syringe, draw up 20 ml of normal saline solution

Gently insert appropriately-size lubricated silicone catheter into the rectum, approximately six (6) inches (size of the catheter is dependent on the size of the child).

Place the catheter tip syringe into the end of the silicone catheter and inject 20 ml of normal saline solution into the rectum.

Disconnect syringe from the end of the catheter; allow the normal saline solution to drip into an empty emesis basin which will be used for your discarded solution

Repeat this process until the discarded fluid is clear

***NOTE:** It will be important between instillations of the 20 ml of normal saline solution to allow the solution to drain from the catheter into the emesis basin with the discarded solution. For example, if you are giving 100 ml of normal saline, you should have the same amount of solution plus stool in the basin. This is a proper irrigation. This process is very different than an enema which inserts the fluid but does not allow it to passively come out.

If Flagyl is added to saline solution, the following is the protocol

Protocol FOR COLONIC IRRIGATIONS WITH FLAGYL (Metronidazole)

RATIONALE: Patients with Hirschsprung's Disease may commonly suffer from enterocolitis, either before or after corrective surgery. They have an underlying dysmotility of the colon which leads to the stasis of their stool, subsequent bacterial overgrowth and then secretory diarrhea. Sometimes the enterocolitis gives less dramatic symptoms such as failure to thrive and intermittent cramping and abdominal pain.

The treatment of enterocolitis when it is severe enough to warrant inpatient care involves aggressive colonic irrigations, intravenous antibiotics (Metronidazole) and intravenous hydration. Upon discharge, or with a mild case that can be treated on an outpatient basis, Flagyl can be given prophylactically either orally or via colonic irrigations.

We have found that oral Flagyl is poorly tolerated by many children because of its metallic taste and have, therefore, utilized the same dose of Flagyl given in the daily irrigation, and have been found this to be very effective. Its goal is to treat the colonic bacteria causing the enterocolitis, most specifically, Clostridium Difficile. The irrigation overcomes the stasis of the stool and allows for more frequent emptying of the colon.

DOSING: The dosing specifications for irrigant Flagyl are as follows:

500 mg Flagyl (intravenous solution) in 100 ml normal saline solution*

*For infants and children, not > 30 mg/kg/day.

ADMINISTRATION:

Ideally, a patient should be irrigated first with normal saline solution beginning with 10-20ml at a time for a total of 20ml/kg. The rationale is to clean the colon of stool before instilling Flagyl irrigation.

To begin Flagyl irrigations, proceed as follows

- Access the Flagyl solution with a Pentothal pen
- Gently squeeze the bag of Flagyl solution into a non-sterile basin (emesis basin)
- Using a 60 ml catheter tip syringe, draw up 20 ml of Flagyl solution at a time.
- Gently insert appropriately-size lubricated silicone catheter into the rectum, approximately six (6) inches (size of the catheter is dependent on the size of the child).
- Place the catheter tip syringe into the end of the silicone catheter and inject 20 ml of Flagyl solution into the rectum
- Disconnect syringe from the end of the catheter; allow irrigant to drip into an empty emesis basin which will be used for your discarded Flagyl solution
- Repeat this process until the total amount of Flagyl solution ordered as been instilled

***NOTE:** It will be important in between instillations of the 20 ml of Flagyl solution to allow the solution to drain from the catheter into the emesis basin with the discarded solution. For example, if you are giving 100 ml of Flagyl solution, you should have the same amount of solution plus stool in the basin.