

# Colonic Irrigation

This guide is to help parents perform this procedure under the supervision of their nurse or physician.

Patients with Hirschsprung's disease may suffer from an inflammatory process of the colon called "colitis". Colitis could affect your child before or after corrective surgery due to an obstruction to the outflow in the rectum causing immobility of stool, bacterial overgrowth and inflammation of the colonic mucosa. Colitis produces hypomotility (slow transit) worsening the obstruction and secretory diarrhea. Sometimes colitis gives other symptoms such as failure to thrive and intermittent cramping and abdominal pain.

The treatment of colitis involves release of the obstruction with a rectal catheter and irrigations of the colon, antibiotics (metronidazole) and hydration.

Rectal irrigations are the best method to clean (wash out) the colon of stool and to prevent "stasis" of stool in the colon. Your child should be irrigated with normal saline solution beginning with 10-20 ml 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

1. One silicone Foley catheter.  
16fr for children under one year of age  
24fr for children over one year of age
2. 60ml catheter tip syringe
3. Lubricant such as KY® jelly
4. Two unsterile basins such as emesis basins
5. Saline solution



Foley



Syringe



Lubricant



Emesis basin



Saline solution

The caliber of the Foley is based on child size; parents may purchase sizes between 16fr and 24fr based on anus size and integrity of the rectum. The lumen sizes of these catheters are larger to allow passing of thick stool through the catheter.

### How to make irrigation

1. Pour normal saline solution into a non-sterile basin (emesis basin).
2. Using a 60 ml catheter tip syringe, draw up 20 ml of normal saline solution.
3. Lubricate 2 inches (5 cm) the distal part of the Foley.
4. Gently insert the Foley into the rectum, approximately 4-6 inches (10-15 cm); depending on the size of the child.
5. Allow the gas and stool to come out freely.
6. Place the syringe into the end of the silicone catheter and inject 20 ml of warm normal saline solution into the rectum.
7. Disconnect syringe from the end of the catheter; allow the normal saline solution to drip into an empty basin, which will be used for your discarded solution.

Repeat this process until the discarded fluid is clear.

**Note:** It is important to observe the volume between instillations of saline solution drained from the catheter into the basin; you should have the same amount of instilled solution plus stool in the basin. **This process is very different than an enema, which introduces the fluid but does not allow it to passively come out.**

### Colonic Irrigations with metronidazole (Flagyl®)

#### Explanation

Flagyl® given orally may be poorly tolerated by some children because of its metallic taste, therefore, utilized in the daily irrigation is very effective. The goal is to treat the bacterial overgrowth, most specifically, *Clostridium difficile*. The irrigation overcomes the stasis of the stool and allows for more frequent emptying of the colon.

#### Dosing

30 mg/kg/day. Flagyl® intravenous solution is 500 mg in 100 ml. (1 ml = 5 mg)

#### Administration

Your child should be irrigated with normal saline solution. The quantity of solution that you have to use is based on your child's body weight and it is calculated as 20 ml of solution per each kilogram of body weight (20 ml per each 2.2 pounds); for example: if your child's weight is 10 kg (22 lbs.), you have to use 200 ml of saline solution giving 10-20 ml at a time until you have used the 200 ml. The rationale is to clean the colon of stool before instilling the Flagyl®.

### How to make irrigations with Flagyl®

To begin Flagyl® irrigations, proceed as follows:

1. Access the Flagyl® solution with a syringe according with the dose for you child and squeeze the solution into a non-sterile basin.
2. Using a 60 ml syringe, draw up 20 ml of Flagyl® solution at a time.
3. Gently insert lubricated Foley into the rectum.

4. Place the syringe into the end of the Foley and inject 20 ml of Flagyl® solution into the cleaned rectum.
5. Disconnect syringe from the end of the Foley; allow solution to drip into an empty basin, which will be used for your discarded Flagyl® solution.
6. Repeat this process until the total amount of Flagyl® solution ordered as been instilled.

**Note:** It is important to observe the volume between instillations of Flagyl® drained from the catheter into the basin; you should have the same amount of instilled Flagyl® plus stool in the basin.

#### **Contact Us**

For more information about colonic irrigation or to request an appointment with the Colorectal Center for Children at Children's Hospital of Pittsburgh of UPMC, contact us at **412-692-7280** or by email at [colorectalcenter@chp.edu](mailto:colorectalcenter@chp.edu).