



Children's Urology Group, PL

ACE PROCEDURE: IRRIGATIONS

Malone Procedure - MACE

BACKGROUND

The Malone Antegrade Continence Enema or MACE has been used for over a century in children who have difficulty either passing a bowel movement or who have chronic incontinence (accidents). You may also hear the procedure referred to as a Malone procedure - after the physician who popularized the method about 20 years ago.

HOW IT WORKS

The concept behind the procedure is to empty the colon of stool using fluid (similar to an enema) which is infused through a **catheter (tube) in the proximal colon rather than from below. Ideally, the distal colon (rectum) will remain empty for the majority of the day following irrigation.**

WILL IT WORK

Stool accidents may still occur. Although with adjusting the amount of irrigation and timing, this can be markedly improved.

TYPICAL SCHEDULE

A catheter will typically be left through the ostomy for the first two weeks. During this time you should flush it daily with 100 ml of homemade saline (see below). After this time period, your physician will typically remove the catheter and have you begin to place a thin catheter into the stoma daily and irrigate with water or saline. Amounts will vary depending on the size of the child from 500 ml to 1000 ml. Most irrigations are daily, however, some children will need two irrigations a day. Irrigations are given using a gravity flow bag that attaches to your catheter.

In the first two weeks, irrigations are given with a 60-ml syringe, which will be provided to you prior to discharge from the hospital.

MIXING NORMAL SALINE SOLUTION

Add one level teaspoon of table salt to each pint (1/2 liter) of water. If you use well water, boil it for ten minutes, let cool for one hour, and then boil another ten minutes before mixing with salt. Normal saline solution can be stored at room temperature for three days in a closed container.

STEPS TO IRRIGATION:

1. Pass the catheter at least half way in
2. Infuse the irrigation solution
3. Remove the catheter
4. Wash the catheter after each use with soap and water. Air dry.
5. Replace the catheter every 2 to 3 weeks or more frequently if becoming clogged with stool or if mineral oil is added to irrigation.

IF CONSTIPATION IS NOT IMPROVING

Adding 15 to 30 ml of mineral oil into the ACE just before each irrigation, may be helpful. Other things that may help can be of a pediatric Fleet enema into the catheter just before the irrigation, or glycerin. Contact your physician's office for instructions for additives to your ACE program.

IF YOUR CHILD IS ALLERGIC TO LATEX

Please notify us, as a special non-latex catheter will be used in these cases.

REMEMBER

In the beginning, the irrigations may seem difficult to give and to fit into your daily routine. However, as you and your child become more comfortable with the process it will become a fairly straightforward routine. You may still have to alter your child's diet or medication. It will be important to find the time of day that works out best for your schedule and that leaves your child with the optimal stooling.

AFTER SURGERY

Your child may shower the day after surgery. Clean the area around the stoma with mild soap and water, gently pat dry. Your child may swim or tub bathe one week after surgery. Do not allow your child to lift anything heavier than 5-lbs or participate in strenuous activity for 2 weeks.

CALL TO SPEAK WITH A NURSE

If your child has:

- Fever > 100.5 degrees F
- Increased tenderness at the surgical site
- Increased swelling or redness around the incision or stoma
- Any unusual drainage or odor from the incision or stoma
- Unexplained increase in pain
- Nausea, vomiting, diarrhea, or constipation which is not improving