

Pediatric Cecostomy

Pediatric cecostomy uses surgery to place a small, thin, plastic tube into a child's intestine. The tube allows a caregiver to inject an enema to flush feces out of the body.

Your doctor will tell you how to prepare your child for this procedure. Although the procedure itself is relatively brief, your child may need to stay in the hospital for up to three days. Certain pre-existing conditions may prevent your child from receiving a feeding tube. Talk to your doctor about any concerns you may have.



What is Pediatric Cecostomy?

Cecostomy surgically places a small, thin, plastic tube (called a C-tube) into a child's intestine to allow feces to be cleared from the bowel. The doctor inserts one end of the tube at the beginning of the intestines (called the cecum). The other end remains outside of the belly. Following placement of a C-tube, a caregiver can inject a liquid medicine (enema) into the tube to flush the feces out of the body. Eventually, the doctor will replace this temporary C-tube with a long-term tube that they will change every six months to a year.

What are some common uses of the procedure?

Doctors use a cecostomy when children are unable to have or control bowel movements on their own (called fecal incontinence (<https://www.radiologyinfo.org/en/info/fecal-incontinence>)). This includes severe constipation, unexpected bowel movements, and leaking liquid feces.

Doctors typically use cecostomy when other treatments for this condition do not work. Fecal incontinence may occur because the child:

- is unable to pass feces through the anus
- has spinal or muscular problems.

How should we prepare for this procedure?

Tell your doctor about any medication, contrast material, or latex allergies your child has, as well as previous responses to sedation. List all the medications your child is taking, including herbal supplements.

Your doctor will provide specific instructions on how to prepare your child for the procedure, including any changes to your child's regular medication schedule and instructions about not eating or drinking. This typically includes:

- a clear-liquid diet for two days prior to the procedure
- antibiotics, which are continued up to three days after the procedure
- drinking a laxative the night before the procedure.

What does the equipment look like?

A cecostomy tube is a thin, flexible sterile plastic tube. A catheter is a thin plastic or silicone tube.

This exam typically uses a radiographic table, one or two x-ray tubes, and a video monitor. Fluoroscopy converts x-rays into video images. Doctors use it to watch and guide procedures. The x-ray machine and a detector suspended over the exam table produce the video.

This procedure may also use devices to monitor your child's heart rate and blood pressure.

How does the procedure work?

The doctor inserts the C-tube through the belly and into the cecum. They attach the tube to the inside of the belly wall with stitches to keep it in place. The other end of the tube remains outside of the belly. This allows a caregiver to inject a liquid medicine (enema) through the cecum to flush out the bowels.

How is the procedure performed?

A specially trained healthcare professional, such as an interventional radiologist or surgeon, will usually place a C-tube in an interventional radiology suite.

On the day of the procedure, your child will be admitted to the hospital.

Your child may have an abdominal x-ray to make sure there is no stool in the bowel.

Your child will lie face up on the table. The technologist may use straps and bolsters to help your child remain still. They will insert an IV line into a vein in the hand or arm for general anesthesia (<https://www.radiologyinfo.org/en/info/safety-pediatric-sedation>).

The doctor will clean the skin at the C-tube insertion site (right side of the belly) and cover it with a sterile surgical drape.

The doctor will numb the insertion site with a local anesthetic. They will make a small incision where the catheter will be inserted. The doctor will blow air through a small tube inserted in the rectum to inflate the cecum. Fluoroscopy will be used to guide a needle and then the C-tube into the cecum. Using small stitches, the doctor will attach the cecum to the inside wall of the belly to hold it in place.

Your doctor may perform the procedure with a laparoscope, a thin lighted tube. The doctor inserts the scope through another small incision in the belly button.

The doctor may take an x-ray to make sure the C-tube is properly placed. The nurse will place a dressing over the insertion site.

A cecostomy usually takes 30-60 minutes.

What will my child experience during and after the procedure?

The nurse or technologist may attach devices to your child's body to monitor their heart rate and blood pressure.

Under general anesthesia, your child will be unaware and will not feel pain.

Your child may experience bruising, swelling and tenderness at the insertion site. These symptoms clear up in a few days.

Following the cecostomy, your child will stay in the hospital for up to 3 days.

When your child returns home, you will begin a bowel cleansing routine. This involves injecting a liquid medicine in the C-tube

through the cecum to flush out the bowels. Your doctor will tell you how often you should give your child an enema.

The insertion site will need to be covered with a dressing for two weeks. Change the dressing once a day or whenever it gets wet, dirty, or becomes loose. During this time, your child should not take a bath. After two weeks, your child may bathe, shower, and swim.

Your child can be active with a cecostomy tube. You may want to cover the tube end with a bandage to keep it from getting caught on clothing.

Tell your child's doctor if your child has abdominal pain or fever or if you notice:

- a skin infection at the insertion site
- bleeding or swelling at the site
- the tube moves out of place.

Six weeks after the initial procedure, your doctor will replace the temporary C-tube with a long term cecostomy catheter. There are two types of catheters that your doctor may elect to use – the Chait Trapdoor or the MiniACE balloon button. This tube will stay in place for a longer period of time.

Who interprets the results and how do we get them?

The interventional radiologist may take an x-ray after inserting the C-tube to ensure it is properly placed.

What are the benefits vs. risks?

Benefits

- The C-tube allows a caregiver and child to routinely flush feces out of the bowel to avoid constipation, uncontrolled bowel movements, and leakage, which can be embarrassing.
- Having a C-tube placed allows a child to avoid the painful insertion of an enema tube into the rectum to cleanse the bowels.
- A C-tube allows stool to be flushed out from high up in the colon, which results in fewer accidents.

Risks

Your doctor will take precautions to mitigate these risks:

- Bruising, bleeding or irritation at the insertion site
- Infection at the insertion site or in the belly
- Bleeding and irritation at the tube site
- The growth of tissue around the C-tube
- A displaced or non-working tube
- Injury to the colon or surrounding structures

What are the limitations of cecostomy?

Your child may not be a candidate for a C-tube if they:

- have had a previous abdominal surgery
- have too much soft tissue between the cecum and the surface of the belly
- are unable to sit for a long time (up to an hour) on the toilet.

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