Colectomy
Surgical treatment for Ulcerative Colitis (UC) and Familial Adenomatous Polyposis (FAP)

What is a colectomy?
A colectomy is a surgery that removes the colon, or large intestine. The colectomy and reconstruction of your child’s digestive system may take one, two or three surgeries. The colectomy and reconstruction will be done under general anesthesia. This means that your child will be given medicine to make them sleep without pain during the surgery.

The colectomy can be done laparoscopically or using an “open” surgery. In laparoscopic surgery, the surgeon makes a few small incisions and inserts a thin, lighted tube with a camera and the surgical tools. An open surgery uses one larger incision. Your child’s surgeon will discuss with you the benefits of each type of surgery.

Why does my child need a colectomy?
Your child may need a colectomy for Ulcerative Colitis (UC) if medicines and changes in what they eat and drink don’t control the symptoms. Children with Familial Adenomatous Polyposis (FAP) need a colectomy to remove the chance of getting colon cancer. Children with UC may also have a greater chance of getting cancer later on in life.

How many surgeries does my child need?
Your child may need one, two or three surgeries to complete the colectomy and reconstruction. The number of surgeries will depend on your child’s health.

One-stage procedure
Your child will have one surgery to remove the colon and rectum, and connect the small intestine to the anus. This is not often done in children and teens because it may have greater risks.

Two-stage procedure
This is the most common procedure and is done in two stages.

- During the first surgery the colon and the lining of the rectum are removed (this is called a colectomy and rectal mucusectomy). A pouch is made from the small intestine. The pouch is usually shaped like a “J” and is sutured (attached) to the anus in place of the rectum (see picture 2 on page 2). The pouch stores stool like a rectum.

A temporary ostomy is made to connect the end of the small intestine to the surface of the abdomen. Stool drains into a disposable bag attached to the outside of the body. The ostomy keeps stool from passing through the
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new J-pouch and gives it a chance to heal. Please see our “Ostomy” handout (www.seattlechildrens.org/pdf/PE745.pdf) for more information.

• Your child will have a contrast study done 6 to 8 weeks after the surgery. In a contrast study your child’s doctor will put a liquid dye in through a small tube in the rectum. Then an X-ray is taken to see if the J-pouch has healed.

• The **second surgery** is done about 6 to 8 weeks after the first surgery and the sutures (stitches) in the J-pouch have time to heal. In this surgery the ostomy will be closed (see picture 4 on page 3). Stool will then pass through the anus. At that time your child’s surgeon will check for an anal stricture where the J-pouch was attached. An anal stricture is when the anal opening shrinks in size. The stricture is caused because scars shrink when they heal. It can usually be dilated open during the ostomy closure surgery. Rarely, a surgery is needed to fix the stricture and ostomy closure is delayed.

### Surgery

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<td>• Colectomy</td>
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<td>• Rectal Mucusectomy</td>
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<td>• J-pouch made</td>
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<td>Second Surgery:</td>
<td>2 to 5 days</td>
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<tr>
<td>• Ostomy closed</td>
<td></td>
<td>Return to clinic 1 month later, then yearly or more often as needed</td>
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### Three-stage procedure

The three-stage procedure is used when the colon is so diseased that the rectal lining cannot be safely and fully removed during the first surgery.

• During the **first surgery** the colon is removed (colectomy). An ostomy is made to connect the end of the small intestine and the surface of the abdomen (see picture 3). Stool drains into a disposable bag attached to the outside of the body. The remaining rectum will still produce mucus. This will come out of the anus even with an ostomy in place. See the “Ostomy” handout for more information.

• After 6 to 8 weeks, a **second surgery** is done to remove the lining of the rectum (rectal mucusectomy) and a J-pouch is made from the small intestine (see picture 2). The pouch is sutured (attached) to the anus in place of the rectum. The pouch stores stool like a rectum. Your child will still have an ostomy to keep the stool from passing through the new J-pouch so that it has a chance to heal.
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- Your child will have a contrast study done 6 to 8 weeks after the surgery. In a contrast study your child’s doctor will put a liquid dye in through a small tube in the rectum. Then an X-ray is taken to see if the J-pouch has healed.
- After the contrast study, a third surgery will be done to close the ostomy (see picture 4). Stool will then pass through the rectum. At that time your child’s surgeon will check for an anal stricture. An anal stricture is when the anal opening shrinks in size. The stricture is caused because scars shrink when they heal. It can usually be dilated open during the ostomy closure surgery. Rarely, a surgery is needed to fix a stricture and ostomy closure is delayed.

How do I prepare my child for surgery?

**Surgery** | **Hospital Stay** | **Follow-up**
---|---|---
First Surgery:  
- Colectomy  
- Ostomy made | 7 to 10 days | Return to clinic in 2 to 4 weeks  
Return to any steroids

Second Surgery: (6 to 8 weeks later):  
- Rectal mucusectomy  
- J-pouch made | 7 to 10 days | Return to clinic in 2 to 4 weeks  
In 6 to 8 weeks have contrast study of J-pouch

Third Surgery:  
- Ostomy closed | 2 to 5 days | Return to clinic in 2 to 4 weeks  
Return to clinic 1 month later, then yearly or more often as needed

Review and follow the instructions on the “Before Procedure Checklist” www.seattlechildrens.org/pdf/PE459.pdf. Seattle Children’s has resources to help you talk to your child about their surgery and hospital stay. Call your community doctor or the Children’s specialty clinic that referred your child for surgery to get all the information you need. You can visit the Patients and Families section of the Seattle Children’s website at www.seattlechildrens.org for tips to help your child prepare for their surgery and hospital stay.

What will happen before the surgery?

Your child may be admitted to the hospital the day before surgery to make sure their bowel is cleaned out for surgery. Golytely may be used to do this. Golytely cleans all of the stool out of the colon. In some cases you may be asked to give your child only clear liquids and antibiotics 24 hours before the surgery. This is also to clean the stool out of the colon. The antibiotics help clean the gut.
If your child has to take Golytely and cannot drink as much as is needed, a nasogastric (NG) tube can be placed. An NG tube is a small, flexible tube that goes through the nose into the stomach.

**What happens after the surgery?**

Your child will stay in the hospital after surgery to wait for their gut (intestine) to “wake up.” During the surgery your child may have an NG tube in their nose to remove fluid from the stomach so they don’t vomit. The tube will be removed and your child can start eating once the gut is working again. Your child may also have a bladder catheter to drain urine and one or two drains in the abdomen near the J-pouch. Your child’s surgeon will describe these to you.

Your child will be in the hospital for less time after the final ostomy closure and will likely not need an NG tube, bladder catheter, drain or epidural (used to control pain).

**Will my child be in pain?**

After a surgery your child is likely to have some pain and discomfort. We partner with you and your child to prevent and relieve pain as completely as possible. You know your child best. We encourage you to take an active part in your child’s recovery by talking with your care team about options for your child.

An epidural catheter may be used for pain after the first or second surgeries. Epidural catheters are one way of giving pain relief without injections (shots). The epidural catheter is a thin tube that is put through the skin and threaded into the epidural space (a space just outside of the spinal cord) and numbs the lower part of the body. Your child will need a bladder catheter to drain urine. Both the epidural and bladder catheter are placed when your child is under anesthesia. The bladder catheter and epidural will be taken out when your child’s gut starts working again and they can tolerate food and oral pain medicine.

In addition to medicine prescribed for pain, we will work with you to create a plan that encourages coping activities to treat pain and provide support. No matter the level of your child’s pain, we join you to assess and respond right away. Help your child get better, faster with good pain management.

**What can my child expect at home?**

After a colectomy and the ostomy has been closed, you can expect your child to have:

- Frequent liquid bowel movements. At first, some children will have a bowel movement up to 15 times a day. Extra fiber can thicken up the stool, or your child may take anti-diarrheal medicine. Your doctor will discuss this with you.
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Accidents at first, especially at night.
A sense of urgency and not being able to hold it when they have to go to the bathroom.

As your child’s body adapts to the changes after surgery, you will notice that:

- The number of bowel movements will decrease. Most children will eventually have about 4 to 7 bowel movements a day. Often this is happens the first month after surgery.
- Accidents and sense of urgency will improve. Your child will likely be able to hold it for 30 minutes or more and no longer have day time accidents.
- Your child should eventually be continent (not have accidents) at night.

The improvement in these symptoms will take different amounts of time depending on the child. Some children may take up to a year to reach full bowel control while others may take only a few weeks.

When should I call the doctor?
You should call the doctor if your child has symptoms of bowel obstruction, pouchitis or dehydration.

**Bowel obstruction** - is possible after any abdominal surgery. It is caused by scar tissue on the inside of the abdomen. The symptoms are:
- Failure to pass gas or stool
- Swelling in the stomach (abdominal distension)
- Vomiting, especially green vomit

**Pouchitis** - occurs at least once in many children who have had a colectomy. It can usually be treated with antibiotics. The symptoms are:
- An increase in bowel movements
- Pain with bowel movements
- Blood in the stool
- Fever greater than 101.5 degrees Fahrenheit
- Generally feeling sick

**Dehydration** – encourage your child to drink lots of liquids to prevent them from getting dehydrated. The symptoms of dehydration are:
- Headache or dizziness
- Very tired (lethargy or fatigue)
- Peeing (urinating) less than usual
- Dark pee (urine)