POLYPOSIS COLI, FAMILIAL: Total Colectomy, Rectal Mucosectomy, and Ileal Pouch–Anal Anastomosis

△ GENERAL INFORMATION

A *colon polyp* is a growth that sticks out from the lining of the intestine. *Polyposis* ("many polyps") *coli* ("of the colon") is a condition in which many polyps, sometimes many hundreds of them, are in the colon and rectum. These polyps can be as small as a grain of rice or as large as a walnut. They sometimes cover the colon and rectum so completely that no normal lining of the colon can be seen. This condition is called *familial* because it can occur in families.

COMMON SIGNS AND SYMPTOMS

Often, these polyps don't produce any signs or symptoms. When there are symptoms, the most common is diarrhea or bleeding from the rectum.

DIAGNOSIS

- Taking a careful history of the symptoms can lead to the diagnosis.
- You will have a complete blood analysis.
- Colonoscopy: This is done with an optical instrument that is smooth, flexible, and as big around as your little finger, with a light at its tip. During the procedure, you will be given medicine that will make you feel drowsy. The instrument will be gently introduced through your anus, and the entire large bowel will be carefully examined. With colonoscopy, the doctor can see how much of the colon is involved. Also, if any suspicious areas are seen, a small piece (a *biopsy*) can be taken for laboratory examination. This examination will show what type of polyp it is. This is very important because there are some conditions that can look like polyposis coli but are not and so don't have the risk of developing cancer.

○ TREATMENT

In time, all patients with familial polyposis coli will develop cancer of the colon or rectum if the polyps are not removed. Removal of the polyps in polyposis coli requires removal of the colon. This can be done in several ways as follows:

Option 1. Removing the entire colon and rectum. A pouch is fashioned near the end of the small intestine (the ileum) to collect stool. The ileum is then brought directly to the outside (an *ileostomy*).

Advantages to This Method

- This is the simplest operation and eliminates the risk of cancer developing in the polyps.

Disadvantages to This Method

- There is the need to empty the pouch of stool several times each day or to wear a bag, or both.
- You have to wear a bag on the side to collect stool that may leak out the ileostomy.
- There is a very small chance that the operation may damage important nerves in the pelvis. For men, this means they would not be able to have an erection.

Option 2. Removing the colon **only.** A pouch is fashioned near the end of the small intestine (the ileum) and the end of the ileum is connected to the rectum.

Advantages to This Method

- The stool comes out through the anus.
- For men, the ability to have an erection is not changed.

Disadvantages to This Method

- There are 6 to 8 bowel movements per day.
- You will need to have proctoscopy at regular intervals for the rest of your life to be certain that cancer does not develop in the polyps that are left in the rectum.
- In spite of these precautions, the risk of developing cancer of the rectum is quite high.

Option 3. Removing the colon and then only the lining (the *mucosa*) of the rectum that grows the polyps. The small intestine is passed through the rectum (that no longer has mucosa) and is connected to the anus.

Advantages to This Method

- The end of the small intestine will be fashioned in such a way that it has a pouch in which stool can collect before it comes out the anus.
- It gets rid of all of the polyps.
- Bowel movements can come through the anus.
- This operation does not change the ability of a man to have an erection.

Disadvantages to This Method

- It is a more serious operation.
- You will have 6 to 8 bowel movements a day. However, you will be trained in exercises to learn how to squeeze your sphincter enough to keep the somewhat loose stool from soiling your underclothing. After 6 months, most individuals develop control of their stool during the waking hours. Once in a great while, there is leakage during sleep.

After the most careful consideration of all factors, it is recommended that you have the operation in Option 3. The reasons for this recommendation have been explained to you, but you should feel perfectly free to ask any questions you wish now or later.

PREOPERATIVE PREPARATION

- You will have an examination of your blood, urine, heart (EKG), and lungs (chest x-ray).
- Do not eat or drink anything for 8 hours before the operation.

□ OPERATION

- You will be asleep for the operation.
- This operation will be done both from above on the abdomen and from below in the anus area.
- The entire colon but only the lining of the rectum will be removed. The small intestine near its end (the ileum) will then be fashioned into a pouch to collect stool as it comes down into it. The end of the

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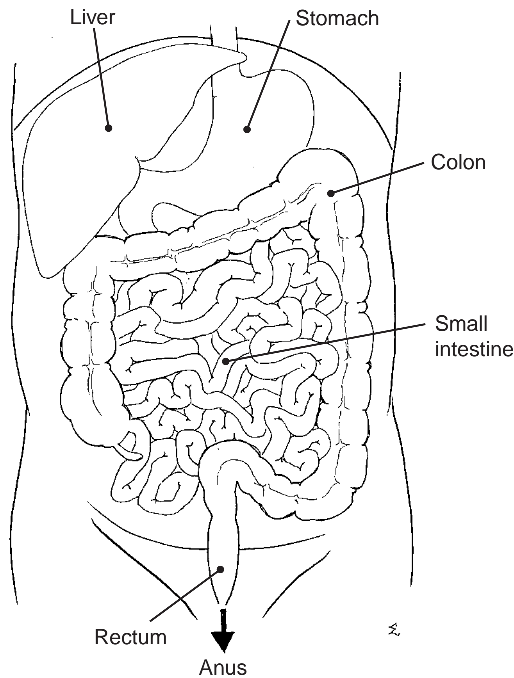

Figure 1. Normal relationships among the small intestine, colon, rectum, and anus.

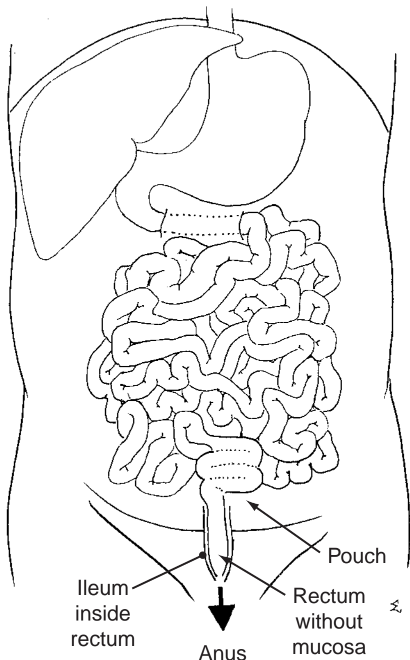

Figure 2. All of the colon is removed, and the small intestine (the ileum) is connected to the rectum.

ileum is passed through the rectum (without mucosa) and connected to the anus (Figs. 1 and 2).

- The operation usually takes about 4 or 5 hours.

POSTOPERATIVE CARE

- You will be taken to a recovery room and observed. When your blood pressure, pulse, and breathing are stable, you will be taken to a regular hospital room.
- You will have a thin plastic tube in your nose. It goes down to your stomach to suck up the air you swallow. It will be removed when your bowels start working.
- The evening after the operation you will be helped to sit up in bed and on the next day to get out of bed.
- Pain will be controlled with medicine.
- After your bowels start working, the tube in your nose will be removed and you will be started on a diet that you and the dietitian will arrange.
- The hospital support team of the doctors and nurses will work with you early and diligently to help you learn how to strengthen the sphincter of your anus.
- As with any operation, complications are always possible, some of them serious. With this type of operation, complications can include infections, leakage at one of the suture lines, bowel obstruction, blood clots, and possibly others.
- You should be able to go home in about 1 week.
- Arrangements will be made for your medicine, follow-up office visit, and stitch removal.

HOME CARE

- Continue with the program started while you were in the hospital.
- You may walk about as you wish, even climb stairs, but don't overdo things.
- You will be given a suggested appropriate diet to follow during your convalescence.
- Take the medicines prescribed for you.
- Arrangements can be made for a home visiting nurse if one is needed.
- You will be advised on how to go about taking a shower.

Remember that it will take a little time to become adjusted to this important change in your life. We will help you as much as we can so don't become discouraged during this period.

CALL OUR OFFICE IF

- The incision becomes red or swollen, or there is drainage from it.
- You develop a temperature higher than 100°F.
- You have any questions.

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