Informed Consent – Colectomy

Department of Surgery, Nagasaki University Graduate School of Biomedical Sciences

You have been recommended surgery to remove part of the colon (large intestine) – termed colectomy. This operation aims to remove a diseased portion of the bowel, usually without the need for a stoma (bag).

Indications

- Removal of the colon and rectum is the mainstay of treatment for cancer. It can be curative or palliative, meaning the surgery is performed to relieve symptoms. Surgery for colon cancer may be combined with other forms of treatment, including radiotherapy and chemotherapy.
- The extent of removal of the colon varies depending on the site of the disease. When
 removing the colon to treat cancer, all lymph nodes that drain the tumor are also
 removed.

Surgical Procedure

- Before surgery, the bowel is prepared in order to decrease the incidence of infection.
 Preparation begins a few days prior to surgery. The patient consumes only liquids the day before surgery and is given a laxative to clear the bowel prior to surgery.
- Intravenous fluids are given the day before surgery to prevent dehydration resulting from diarrhea caused by the cleansing action of the purgatives.
- Intravenous antibiotics are usually administered immediately before surgery to reduce the incidence of infection. These medications may be continued after surgery.
- The procedure is usually performed under general anesthesia.
- An incision is made in the abdomen. The incision is carried through the wall of the abdomen in order to expose the bowel.

- The diseased portion of the colon is identified and that part of the colon and its blood supply are divided and removed.
- A stapler is placed across the colon to seal the colon on each side of the stapler. Then, the stapler is used to cut the colon between the staples. Likewise, a different type of stapler staples the anastomosis together.
- Tumors or lesions in the ascending colon can be treated with surgery to remove the final portion of the small bowel, ascending colon, hepatic flexure and a small portion of the transverse colon (right hemicolectomy).
- In a similar fashion, lesions in the descending colon and sigmoid are treated with left hemicolectomy (removal of the descending colon and adjoining regions of the sigmoid colon, splenic flexure and a portion of the transverse colon) and sigmoid colectomy, respectively.
- After removing a segment of the colon, the two ends of the bowel are joined together (called an anastomosis). Tumors in the upper part of the rectum and lower part of the sigmoid colon are treated with a procedure called anterior resection, in which the rectum and sigmoid colon are removed and the lower end of the rectum is joined to the colon.
- Removal of the entire rectum and part of the sigmoid colon (abdominoperineal resection) is used to treat tumors located low in the rectum.
 - 1. The end of the remaining colon is brought outside of the body to form a colostomy.
 - 2. Polyps or tumors that are located very low in the anal canal can sometimes be resected from below, through the anus (transanal resection of the tumor).

Laparoscopic Colon Surgery

- Due to recent advances in instrumentation, colon surgery can also be performed using a laparoscope.
- This method employs a long tube containing a light and lens system to visualize the area and special instruments to manipulate the bowel through small incisions made in the skin, called ports.

- Stapling instruments similar to those used in routine colectomy have been developed for the laparoscopic approach.
- Laparoscopic colon surgery enhances the prospects of a speedy recovery, as the incisions are small and the patient experiences minimal postoperative pain. The patient may be discharged earlier than after routine open colon surgery.

Complications

In addition to the routine complications associated with the use of any general anesthetic, there can be complications as a result of colon surgery, including:

- postoperative bleeding
- anastomotic leakage
- intra-abdominal abscess formation
- tumor recurrence
- wound infection
- urinary or respiratory infection
- deep vein thrombosis with or without pulmonary embolism
- adhesions causing bowel obstruction
- obstruction at the anastomotic site, etc.

Further surgery is required to correct these complications. If leakage from the anastomotic site is noted, joint surgery is often required and usually necessitates the creation of a temporary or permanent stoma.

After Surgery

- The recovery period after colon surgery is widely variable. It usually involves a stay in the hospital lasting from three to 10 days in uncomplicated cases.
- A catheter will be placed in the urinary bladder for a few days, and the patient will be given adequate pain relief, intravenous fluids, etc.
- For patients who are unable to consume any oral foods or liquids for several days, nutrition will be provided intravenously or through a tube placed in the stomach or bowel.

- The function of the bowel is monitored closely to await the passage of gas and stool after surgery.
- The patient then gradually begins to take liquids by mouth followed later by solid food, after which he or she is discharged home.
- The patient resumes normal activity within one to three weeks.