

**CHS COLORECTAL SURGERY
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**Information for patients undergoing Colon Resection for Benign and Malignant
Conditions**

PLEASE READ THIS SHEET BEFORE YOU CONSENT TO he large bowel (intestine) is made up of the colon and rectum (back passage). This part of the digestive tract carries the remains of digested food from the small bowel and gets rid of it as waste through the anus. Cells that line the colon and rectum may begin to grow out of control, forming a polyp or tumor (a growth of abnormal cells). The large intestine has four sections: the ascending colon, the transverse colon, the descending colon and the sigmoid colon. Tumors can start in any of these areas or in the back passage. Tumors start in the innermost layer and can grow through some or all of the other layers.

The Operation

Surgery is the main treatment for tumors of the bowel. Removal of the diseased bowel is the first treatment for a tumor of the bowel. The goal of the surgery is to give you the best chance of cure through total removal of the tumor. Usually, the tumor and a length of normal bowel on either side of the tumor (as well as nearby lymph nodes) are removed. The healthy parts of the bowel are then stitched or stapled together (anastomosis). If it is not possible to join the bowel back together, an opening (stoma) will be made on the outside of the body for waste to pass out of the body. This is called an ostomy and is made to allow waste to pass through an opening in the abdominal wall. Sometimes, a temporary ostomy is needed until the joined bowel has healed, and then it can be reversed. This is done by further surgery. However, in some cases, the colostomy is permanent, which means it can never be put back, and there will always be an opening on the skin for bowel waste to pass through. A number of different surgical procedures are used depending on where the tumor is. This will be reviewed in detail by your surgeon.

Preparation for Surgery

Before surgery, the bowel may need to be cleansed to facilitate the operation.. You will be on a clear fluid diet and given a cleansing solution the day prior to the operation. This can cause diarrhea and cramps, and may be tiring. The solution will completely empty your bowel. You will then fast for at least 6-8 hours before your surgery.

General Risks of Surgery

- Secretions may collect in the lungs causing collapse and pneumonia. This risk is increased in smokers.
- Clotting may occur in the deep veins of the leg. Rarely part of this clot may break off and go to the lungs. This can be life threatening and its risk is increased in smokers and obese patients.
- Circulation problems to the heart or brain may occur which could result in a heart attack or stroke. Smokers and obese individuals are at increased risk.
- Death is possible during or after an operation due to severe complications.

Specific Risks of Surgery

Leakage of Bowel fluid inside the abdomen (anastomotic leak)

This situation occurs when there is infection at the where the two ends of bowel are joined. The risk is about 5%. If mild it is treated with antibiotic, moderate infection is treated with non-surgical drainage. If severe (1-2%), further surgery and a temporary colostomy may be required. The risk is increased in smokers, obese patients and those with weakened immune systems due to disease or medications.

Ileus (intestinal paralysis)

This occurs for 48-72 hours after all colon operations. In 2-5% of cases, it is prolonged and severe requiring bowel rest (nothing to eat or drink), insertion of a tube through the nose to empty the stomach and sometimes intravenous high calorie supplementation is needed. The vast majority of cases resolve on their own, further surgery is rarely required. Xrays and/or a CAT scan are used to diagnose this condition.

Wound Infection

The surgical incision may become infected. This is treated with antibiotics by mouth or by vein or the wound may need to be opened to drain. Although it takes longer, the wound will eventually heal as if it were closed with sutures. The risk is increased in smokers and obese patients.

Urinary Tract Infection

Bacteria enter the tube draining the bladder. The earlier, the catheter is removed, lower the infection rate. Generally, the tube is removed 2-4 days following surgery. If infection occurs, antibiotics are used to treat it. In some cases, prolonged catheter drainage is required because of pressure on the bladder required during the operation. This is more common in men, especially those with an enlarged prostate.

Damage to the Ureter (tube that leads from the kidney to the bladder)

The ureter is a delicate tube that carries urine from the kidney to the bladder. It lies directly in the operative field and therefore can be damaged during surgery if the bowel next to it is diseased. As a precaution, colon operations are commonly preceded by a procedure that inserts a guide into this tube to avoid this complication. If an injury occurs, it is usually corrected at the time of the operation. Rarely, procedures or further surgery may be required.

Postoperative Bleeding

Significant bleeding occurs in about 5% of patients and either requires no treatment or with blood transfusion. Rarely, further surgery to control the

bleeding is required.

Bowel Blockage (Obstruction)

This occurs when scar tissue often referred to as adhesions, form internally as a part of the natural healing process. This can result in kinking or twisting of the small intestine. Patient then experience bowel movement stoppage, abdominal distention, nausea and vomiting. While the symptoms are identical, this is different than "ileus" described above. Only your surgeon can distinguish the two and xrays or a CAT scan are required. Treatment is the same as for ileus. Obstruction may occur immediately after surgery or many years later. It is the most common abdominal complication of colon surgery long term. Precautions are taken at the time of surgery to reduce this problem but it cannot be eliminated.

Stoma Problems (for those with a colostomy or ileostomy)

Skin irritation: This happens to everyone with a stoma at some point. This usually occurs in response to irritation from the appliance or the glue that causes it to adhere to the skin. Various medicines can be applied to relieve this or a change in the type of appliance may be required. The ostomy nurse will assist with this.

Prolapse: This is excessive protrusion of the stoma. Usually no treatment is required as it can be easily pushed back in in most cases by applying a warm moist washcloth and gentle pressure. If large, surgery may be required. For temporary stomas, reversal of the stoma corrects the problem.

Hernia: A bulge that occurs around the stoma due to weakening of the abdominal wall due to the presence of the stoma. Small hernias require no treatment, larger hernia require a truss or support device to be worn. If large, symptomatic and unsightly, surgical repair may be required.

Loss of blood Supply: This occurs due to pressure around the stoma due to conditions in the abdomen at the time of construction, particularly obesity. The blood supply is choked off and the stoma can die. Most times this resolves when the swelling from surgery subsides however surgical correction may be required early after surgery or later when chronic lack of blood supply results in narrowing (stricture).

WHAT TO EXPECT AFTER YOUR SURGERY

In- Hospital Care

After the operation the nursing staff will closely watch you until you have recovered from the anesthetic. You may even be cared for in the intensive care unit immediately following your surgery.

The recovery period after colon surgery varies. It usually involves a stay in the hospital from 3-7 days in uncomplicated cases. On return from your surgery you will have a catheter (plastic tube) in the bladder to measure and drain your urine.

After surgery you will be given intravenous fluids (a drip) through which antibiotics may be given. The drip will remain in place until you are able to drink enough fluids. It generally requires 3-4 days before the colon has healed well enough to tolerate anything by mouth. You know the bowel has started to work again when you pass gas and/or have a bowel movement. You will then begin to take liquids by mouth and then solid food.

It is likely that on your return from surgery you will be wearing tight fitting stockings that are used to reduce the risk of blood clots forming in your legs. In addition, it is very important that you start moving as soon as possible. This helps to prevent blood clots forming in your legs and possibly going to your lungs. This can be fatal.

Also, you need to do your deep breathing exercises. Take ten deep breaths every hour to prevent secretions in the lungs from collecting. If this happens, you may develop pneumonia. At all costs, avoid smoking after surgery as this increases your risk of chest infection. Coughing is painful after abdominal surgery do not hesitate to use the pain medication provided.

Colostomy (“stoma” or “bag”)

Many patients undergoing colon surgery require a stoma. The colostomy or ileostomy drains bowel waste into an external bag attached to the abdomen. Most colostomy waste is softer and more liquid than normally passed bowel waste. The thickness of the bowel waste depends on where the stoma is. You will be taught how to clean around the colostomy and change the colostomy bag. The colostomy bag sticks to the skin around the stoma with special glue, and can be thrown away when dirty. This bag does not show under clothing, and most people learn to take care of these bags themselves. Stomas may be temporary or permanent, if reversible a second operation is always required.

Wound

Your wound will usually have no visible stitches or staples and is usually covered with a dressing. In certain cases staples or stitches are used to close the incision and will need to be removed at a later date.

Drains

You may also have a small tube that drains into a bag or a bottle from near your wound. This drain removes fluid from the surgical site and is usually removed within a few days after surgery at the bedside.

Pathology Report/Need for further treatment

Depending on the pathologist’s report, which is available 5- 7 days after the operation, further treatment may be required. These include:

Surgery- in rare circumstance an additional operation is required

Radiation Treatment- this been used for some people as the main treatment for rectal tumors but is not normally used in colon tumors. Radiation therapy is not as effective as surgery for patients who could normally be treated by bowel removal.

Chemotherapy (use of drugs to treat tumor) is usually used together with surgical removal and may not be offered as the only treatment".

Postoperative Instructions (after Discharge)

1. Soft diet for first week. Try eating six (6) small frequent meals rather than 3 big meals. Excessive sweets tend to make the stools more liquid. Add one new food at a time in small mounts. Drink plenty of fluids.
2. Fiber: Avoid raw vegetables and raw fruits for 1-2 weeks. Gradually increase the

- fiber in your diet, as this will thicken the stool. Lessen the doses of Metamucil, Konsyl or Citrucel if abdominal cramps or bloating occur.
3. Activity: Avoid activity which causes pain. Walking and climbing stairs OK. No lifting more than 20 lbs and no vigorous sports for 4-6 weeks or as directed.
 4. Resume home medications except: Aspirin or NSAIDS unless otherwise directed by the Doctor.
 5. No driving until seen in the office, riding in the car as a passenger is permitted.
6. **Common problems**
- a) **Wound problems:** It is okay to shower and get the incision and staples wet. Some drainage from the incision is common; a light gauze pad over the incision can be helpful. If drainage is cloudy or associated with fever > 101 degrees, call the office.
 - b) **Medication reactions:** Reactions to medicines can occur. The most common symptoms are nausea, vomiting, or itching related to taking the medication. If this occurs stop the medication and contact the office.
Note: All Narcotics cause constipation
 - c) **Urinary difficulties:** Urinary tract infections occasionally occur following abdominal surgery. Pains with urination and/or blood in the urine are symptoms of infection. Bring these symptoms to the doctor's attention at your post-op visit.
 - d) **Bowel obstructions:** abdominal cramps, bloating, nausea, vomiting, and constipation. When these develop, call your physician for advice. If the symptoms are mild, you may restrict intake to liquids only and avoid solid food. If the symptoms are severe or if persist beyond 24 hrs, call your physician.
 - e) **Irritation around anus from severe diarrhea:** Use Destin ointment or Skin protective paste. Avoid vigorous wiping after a bowel movement. Instead use a shower nozzle attachment to clean the area. A warm tub bath or sitz bath is also helpful. Pat gently dry afterwards. Baby wipes can be used instead of toilet paper.
 - f) **Steroid withdrawal:** If you had been on prednisone for a long time and have now stopped the medication, you are at risk for steroid withdrawal if the weaning is too rapid or if you are in a stressful situation. The manifestations may be vague with severe fatigue, nausea, fever/chills and joint aches being the most common. If there is no improvement within 24 hours, call your physician.
 - g) **Infection:** If you experience fever above 101 degrees, shaking, chills, lower abdominal discomforts, difficulty in passing urine and sometimes drainage of pus from wound, call your physician.
7. Call the office on the day of your discharge to make follow up appointment in 1 to weeks (as directed at time of discharge).

On-call physician: To reach the doctor on call, dial the office number anytime day or night 631-862-3600.

The following is a brief list of the most common issues for which you should contact the physician:

- **Large amounts of bloody leakage from the wound.**

- **Blood in the stool.**
- **Fever and chills.**
- **Pain that is not relieved by prescribed pain killers.**
- **Tender, swollen abdomen.**
- **Swelling, tenderness, redness at or around the incision**

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