

MBBS (Hons) Syd. MMED (Clin Epi) FRACS
Colorectal and General Surgeon - Provider No. 065326DK

COLORECTAL RESECTIONS

What is a colorectal (bowel) resection?

Surgery to remove a part of the large bowel is called a resection. Different parts of the colon require different operations and have different names e.g. right hemicolectomy, anterior resection.

How is the surgery performed?

All the operations are performed under general anaesthesia in a major hospital. It can be done open or laparoscopically (key hole).

Who should perform the surgery?

Your surgery should be performed by a trained colorectal surgeon. Several important studies have shown that the results are superior if the operation is performed by a colorectal rather than general surgeon. Colorectal surgery requires specific training after general surgical qualifications have been obtained. Also refer to FAQ on how to select your surgeon.

What conditions need surgery?

Almost any colorectal problem can require surgery but the common ones include cancer, diverticular disease, ulcerative colitis and Crohn's disease. The operations can be elective (planned) or emergencies for problems such as perforation, bleeding and obstruction.

What is the colon?

The colon is the last part of the gastrointestinal tract. The gastrointestinal tract begins at the mouth, becomes the oesophagus, stomach, small bowel then colon. It ends at the rectum and then anus.

What does the colon do?

The colon has no role in absorbing nutrients (the small intestine does this). The colon absorbs water and salts. You can live without your colon.

What happens when some of the colon is removed?

Depending on which part is removed, the colon is either joined together (an anastomosis) or a bag is made (a stoma). Sometimes a stoma will be made even if the bowel is joined (e.g. after rectal cancer surgery).

Will my bowel function return to normal?

Obviously this is only relevant if the bowel is joined. In general removal of part of the bowel will result in an alteration in bowel habit. This is variable and not predictable. Most patients will have initially some increase in frequency and some urgency. There may be some bloating and food related issues. There is constant adaptation in the remaining colon and bowel function generally improves over several months and years.

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Will I need a bag (stoma)?

A stoma is when a part of the bowel is brought to the skin so that the waste comes to a bag on the abdominal wall rather than the anus. It can be a colonic stoma (colostomy) or small bowel (ileostomy).

There are several reasons to need a stoma. Common indications include surgery on the rectum where there may be insufficient bowel to join together and the patient may need a permanent colostomy. Even if the bowel is joined sometimes a temporary stoma is made to protect the anastomosis. Other reasons to need a stoma include emergency surgery for perforation, bleeding or anastomotic leak.

Can I live a normal life with a stoma?

You can lead a full, normal and active life with a stoma. With the correct advice and guidance from our stoma nurses patients with stomas can travel, swim, play contact sports and everything else.

What are the complications of a stoma?

These are rare. There can be issues related to leakage from the bag, which will irritate the skin and be offensive. This problem is sorted out with an appropriate appliance. There are hundreds of different types of appliance and your stoma nurse will help you with this. There can be problems with stoma retraction and narrowing which may need surgery. You can develop a hernia at the stoma site, which also sometimes need repair. Specifically to ileostomies there are problems with dehydration due to fluid loss. Again, this will be managed by your stoma nurse.

What are the complications of surgery?

General risks that can happen with any operation

1. Risks of anaesthesia: These operations require general anaesthesia. There may be issues related to the medications given or injection sites (vein, artery, epidural).
2. Bleeding: Bowel operations require ligation of large blood vessels and dissection around major arteries and veins. There can be bleeding during and after the operation that may require reoperation and or blood transfusion.
3. Infection: This is common in colon operations due to contamination of the wound by faecal matter. Other infections can occur in the abdominal cavity due to spillage of bowel contents or leakage. You will be given antibiotics during the operation. Some infection complications require surgery.
4. Chest problems: This is due to inadequate lung expansion after the operation due to prolonged lying down and pain. You will be given physiotherapy and encouraged to get out of bed as much as you can.
5. Urinary problems: There is a urinary catheter after the operation. After removal there may be infection or retention. This is commoner in males due to pre-existing prostate enlargement.
6. Heart problems: There may be an exacerbation of underlying cardiac problems. The operation is a major stress on the heart.

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7. Psychological problems: Initially you may become confused due to the medications and unfamiliar surroundings. Later you may become depressed about the whole operation especially if dealing with cancer. There is nothing wrong with this and it is a natural response to a stressful situation. A proportion will need short-term antidepressant medication.
8. Blood clots: You will be given prophylaxis for DVT during and after the operation. A DVT presents with a swollen, painful leg. The diagnosis is made with an ultrasound. The risk is embolisation of the clot to the chest which is life threatening and manifests with shortness of breath and pain on breathing. The treatment is anticoagulation of the blood with medication.
9. Death: This is a rare risk of any operation but is relatively higher in colorectal surgery due to the complex nature of the organ and disease.

Risks specific to bowel surgery

1. Anastomotic leak: This is the most feared complication of colorectal surgery. It is rare but life threatening. There is leakage of bowel contents into the abdominal cavity that causes severe infection. The risks depend on which part of the bowel is removed, the underlying pathology and patient co-morbidity and age. There are signs of infection with pain, fever, high pulse rate and abnormalities on scans and blood tests. Treatment requires antibiotics, drainage procedures and sometimes surgery. In the worst cases a stoma is needed. This may be temporary or permanent.
2. Stoma complications: See above.
3. Sexual problems: This is specific to operations on or near the rectum, which is very close to the nerves, which control sexual function. Both sexes are affected but the male sexual dysfunction has been better studied. In males if the nerves are damaged there may be problems with ejaculation and or erection. The problem can be temporary or permanent. It is worsened if there are pre-existing problems or if radiotherapy has been given.
4. Bowel problems: Patients may develop a paralytic ileus, which is delayed return of bowel function. This is due to handling of the bowel during the surgery and results in the bowel slowing to the point of causing abdominal swelling and vomiting. The treatment involves resting the bowel and sometimes decompressing the stomach with a tube placed through the nose. Later bowel problems may develop if adhesions (scarring) causing bowel obstruction. This is treated similarly to an ileus and only rarely needs surgery.
5. Continence: This is more common after rectal surgery but can occur with any colon surgery if there were preoperative issues with continence. The problem usually relates to frequency of bowel motions and mostly is self-resolving.
6. Damage to surrounding anatomy: Different parts of the colon are close to major anatomical structures that can be damaged or require removal during surgery. Organs near the colon include the bladder, ureter, spleen, uterus, major blood vessels and small bowel.
7. Hernias : This is a long-term complication related to the abdominal wound becoming weaker. It is relatively common after bowel operations and will likely need surgery to repair.

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What tests will I need before the operation?

This will depend on the reason for the operation. For example cancer patients will need imaging (special XRays) to specifically stage the cancer. Other investigations will be determined by any other illnesses you have. It is likely you will need blood tests, X-Rays and an ECG. This may be done at a preadmission clinic. You will be advised accordingly.

Will I need any bowel preparation?

Some operations but not all need bowel preparation. [LINK](#). You will be advised accordingly.

Will I need to stop any medications?

The only medications that always need to be stopped are blood thinning medications such as Plavix or Warfarin. It is vital that you inform Dr Pathma-Nathan if you are on these medications. They may need replacement with other medications as advised. Some medications such as diabetes drugs or steroids may need dose alteration. Again please notify if you are on these drugs. You will be advised accordingly.

When do I get admitted?

Usually you only need to be admitted on the day of surgery. The hospital will advise the time.

How long is the operation?

Most operations take 2-4 hours. We advise that your family returns home if possible and will be called back in after the procedure.

What happens after the operation?

You will wake up in the recovery ward in theatre before being transferred to the hospital ward. You may need a high dependency or intensive care bed. You will have a urinary catheter, an intravenous drip, various drains and sometimes a nasogastric tube. You will have pain in the wound but this will be well controlled with strong drugs such as morphine.

You will mostly be able to start drinking straight away and be encouraged to get out of bed (with help). You will be seen by Dr Pathma-Nathan and his team very frequently. You will have blood tests and other investigations as required. As your bowel function improves (pass wind, open bowels) your diet will progress to a normal diet. All the tubes will come out over a few days.

You will be in hospital for 5 to 7 days but this is a variable figure. If you have had a stoma placed our stoma nurses will instruct you in its management. When you go home you will be eating normally and having only oral pain killers. You will be able to walk up and down stairs and should be able to manage by yourself pretty well. We do recommend some help at home for a week or so post op.

What happens once I go home?

You will continue to recover at home but expect some difficulties as you are now self-caring and have had a major operation. You will have pain in the wound for up to a few weeks. You will be given strong pain killers that should become less necessary. Try and

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reduce taking these and replace them with “over the counter” medications such as Panadol or Nurofen. You will feel generally weak and lethargic. Make sure you rest.

What are worrying symptoms?

Please urgently contact Dr Pathma-Nathan or if necessary go to hospital if you have any of these symptoms:

- Pain not settling with strong painkillers
- Vomiting
- Abdominal distension
- Rectal bleeding
- Inability to open bowels or pass wind
- Fever
- Wound breakdown
- Pain in legs
- Shortness of breath

When can I drive?

Once you are off painkillers and can apply an emergency brake comfortably you can drive. This is usually at least one week after going home. You will need to wear a seatbelt.

When can I go back to work?

This depends on what sort of work you do. Some patients can go back to a desk job 2 weeks after going home. A physical job requiring lifting will need 4-6 weeks off work.

When can I lift?

You should not do any lifting for 2 weeks after going home (you can walk up and down stairs and carry small things like your plate and cup). After 2 weeks you should not lift more than 10kg for a further 2 weeks. A good general rule is to listen to your body. If lifting causes pain then stop.

What should I eat?

There are no strong recommendations other than a balanced diet and plenty of water. Many patients find that some foods that they previously had no problems with now cause diarrhoea or bloating. This is unlikely to be permanent but obviously avoid those foods in the short term. You may find your appetite reduced. This again is temporary and we recommend smaller more frequent meals. Pay attention to what you eat but don't get carried away. It is unlikely that you will need a dietician.

Can I drink alcohol?

Yes. But some drinks will affect your bowel function.

Do I need to take anything for my bowels?,

Your bowel function will be different. It will improve over several years and months. You may have to return to the toilet several times and also get up at night. There may be some urgency and you may even have some accidents. Some of these symptoms will be related

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to food but mostly not.. You may be given fibre supplements, laxatives or antidiarrhoeals as necessary. This will be discussed with you at length at your postoperative appointments.

When do I see Dr Pathma-Nathan?

You will be given an appointment at 2-4 weeks.