

# A Guide to Stoma Related Surgical Procedures

This guide tracks every step of the patient’s journey, from the pre-operative stage, through to ongoing daily stoma care management.

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## **Pre-Operative Preparation of the Patient**

Elective patients are referred to the Secondary Care Stoma Team at least 1 to 2 weeks prior to their surgical date by:

- Consultant or medical team member in charge of care
- Colorectal Nurse Specialists
- Urology Nurse Specialist
- Any other healthcare professional involved with the patient's diagnosis

## **The Role of the Stoma Care Nurse Pre-Operatively**

The Secondary Care Stoma Team carries out the pre-operative visit at the patient's home with members of family/friends present.

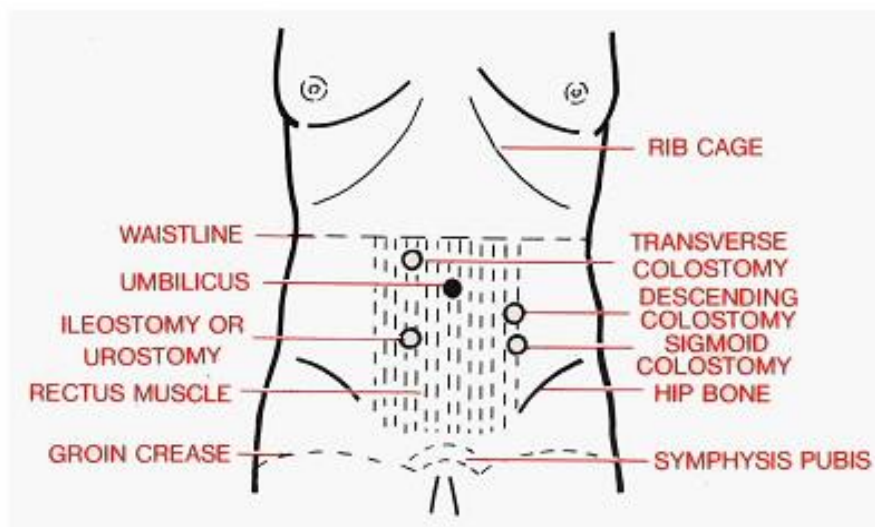
- The stoma service is introduced.
- Pre-operative assessment of the patient, i.e., holistic approach of patient's psychological, spiritual, practical and discharge needs or problems to be encountered.
- Make the patient aware of what a stoma looks like.
- Discuss practical stoma management and with the use of the teaching aid 'stoma personal trainer' show patient how to change a bag and position of the stoma site.
- Detailed advice and explanation of the surgical procedure and outcome.
- General hospital information pre & post operatively.
- Discuss sexual orientation/function and possibility of post-op sexual dysfunction.
- Leave reading material and contact details.
- The correct site of the stoma on the patient's abdomen is of high priority for their physical and psychological adjustment to the stoma. The patient must be sited for their stoma on the day of their admission. The stoma care nurse (SCN) will carry out this procedure, with consent of the patient.

## Emergency Surgery and Stoma Formation

These patients would have had little knowledge of their surgery and require the above information to be given to them during their hospital stay. Patients having undergone emergency surgery require sensitivity and empathy as many may be in shock.

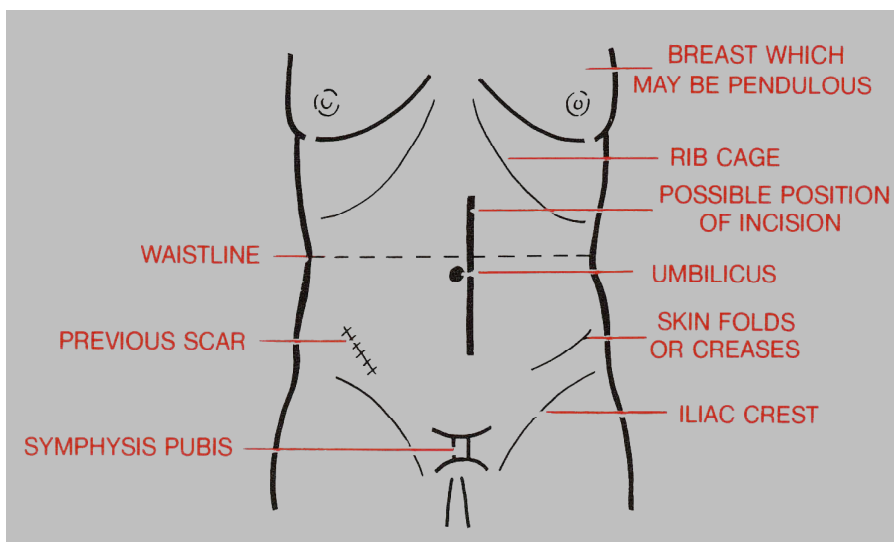
## Stoma Sites

In some cases, a typical siting is impossible either from the nurse's or surgeon's perspective, in which case the most desirable and achievable site should be chosen. Nevertheless, it should be remembered that all stomas must be placed within the rectus muscle.

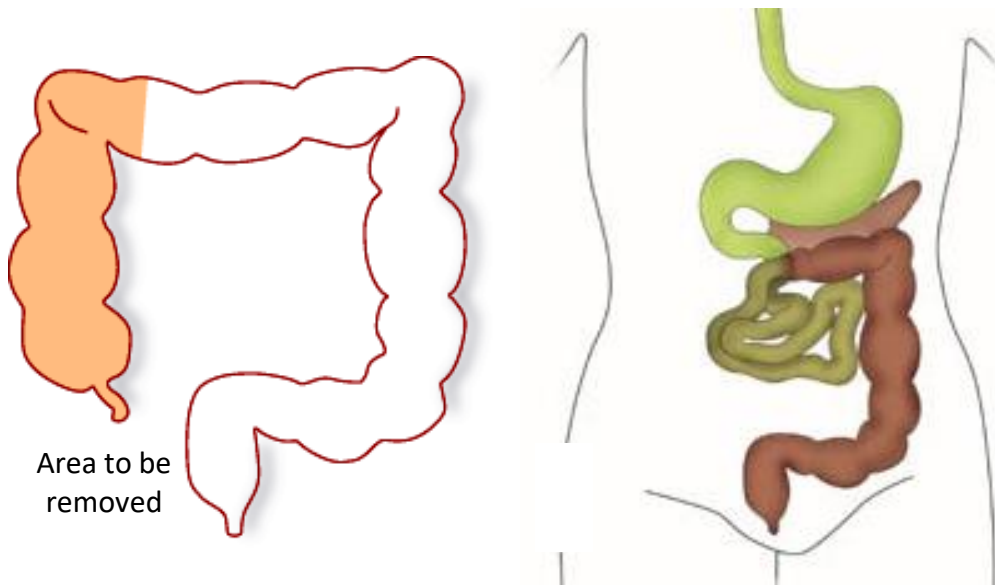


## Stoma Sites to Avoid

Avoid supporting straps attached to an artificial limb or any other surgical appliance e.g. truss.



## Right Hemicolectomy



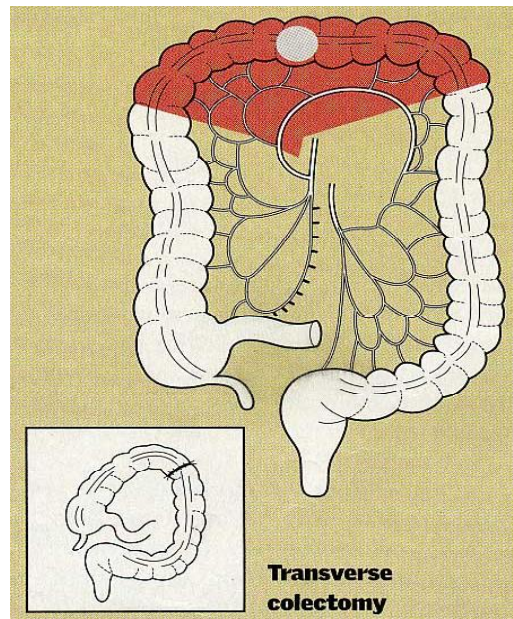
Reason for surgery	Patient's outcome	Care of this patient
<p>To remove cancers from the right side of the colon.</p> <p>The caecum, ascending and right transverse colon are removed, and a primary anastomosis is formed.</p> <p>On most occasions the appendix is also removed.</p>	<p>It is very rare for this surgery to result in a stoma formation.</p> <p>Laparotomy wound may be present or a laparoscopic procedure.</p> <p>Patient may have an increase in their bowel function post-operatively. This should settle after 6 to 8 weeks.</p>	<p>The anastomosis (surgical join in the bowel) can breakdown, most commonly 6-10 days post-op.</p> <p><b>Signs:</b></p> <ul style="list-style-type: none"> <li>• Distended abdomen</li> <li>• Loose stool or constipation</li> <li>• Tachycardia</li> <li>• Hypotension</li> <li>• Pyrexia (signs of sepsis)</li> </ul> <p><b>Patient to attend A&amp;E</b></p>

## Left Hemicolectomy



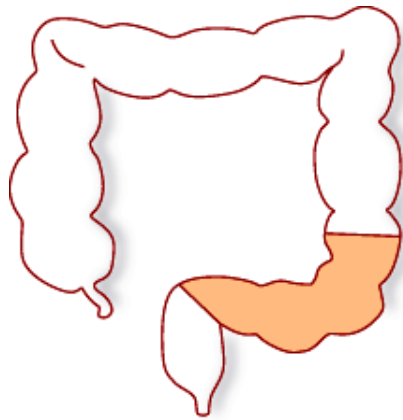
Reason for surgery	Patient's outcome	Care of this patient
<p>The distal part of the transverse colon or descending colon is removed, and primary anastomosis made.</p> <p>Reasons:</p> <ul style="list-style-type: none"> <li>• Left sided cancers</li> <li>• Diverticular disease</li> <li>• Fistulae</li> <li>• Volvulus</li> <li>• Perforation</li> </ul>	<p>Patient is sited for a stoma, but it is unusual for a stoma to be formed unless there has been a perforation that could lead to possible breakdown of an anastomosis.</p> <p>Laparotomy or laparoscopic wound.</p>	<p>The anastomosis (surgical join in the bowel) can breakdown. most commonly 6 -10 days post-op.</p> <p><b>Signs:</b></p> <ul style="list-style-type: none"> <li>• Distended abdomen</li> <li>• Loose stool or constipation</li> <li>• Tachycardia</li> <li>• Hypotension</li> <li>• Pyrexia (signs of sepsis)</li> </ul> <p><b>Patient to attend A&amp;E</b></p>

# Transverse Colectomy



Reason for surgery	Patient's outcome	Care of this patient
<p>Cancer in the transverse colon.</p>	<p>It is rare that the patient will require a stoma but check with surgeon as each case must be treated individually.</p> <p>Laparotomy or laparoscopic wound.</p>	<p>The anastomosis (surgical join in the bowel) can break down, most commonly 6-10 days post-op.</p> <p><b>Signs:</b></p> <ul style="list-style-type: none"> <li>• Distended abdomen</li> <li>• Loose stool or constipation</li> <li>• Tachycardia</li> <li>• Hypotension</li> <li>• Pyrexia (signs of sepsis)</li> </ul> <p><b>Patient to attend A&amp;E</b></p>

## Sigmoid Colectomy



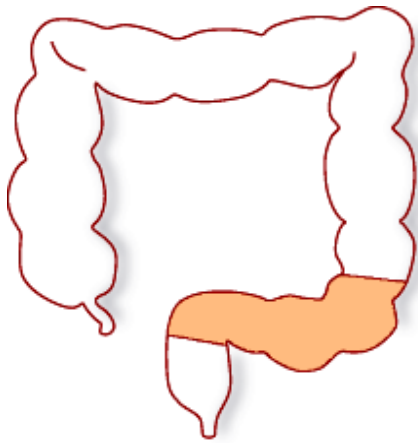
Area to be removed



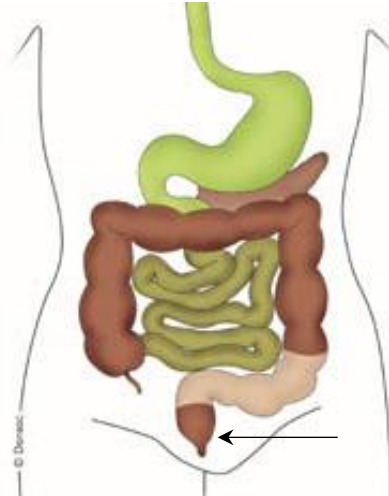
Reason for surgery	Patient's outcome	Care of this patient
<p>The sigmoid colon is removed due to:</p> <ul style="list-style-type: none"> <li>• Diverticulitis</li> <li>• Sigmoid cancer</li> <li>• Fistulae</li> <li>• Volvulus</li> <li>• Perforation</li> </ul>	<p>Most of these patients will not have a stoma, unless they have perforated the bowel or have many co-morbidities, making it difficult to create an end-to-end anastomosis.</p> <p>Laparotomy / laparoscopic wound.</p>	<p>If a stoma has been created, it will be an end colostomy in the left iliac fossa.</p>



## Hartmann's Procedure



Area to be removed



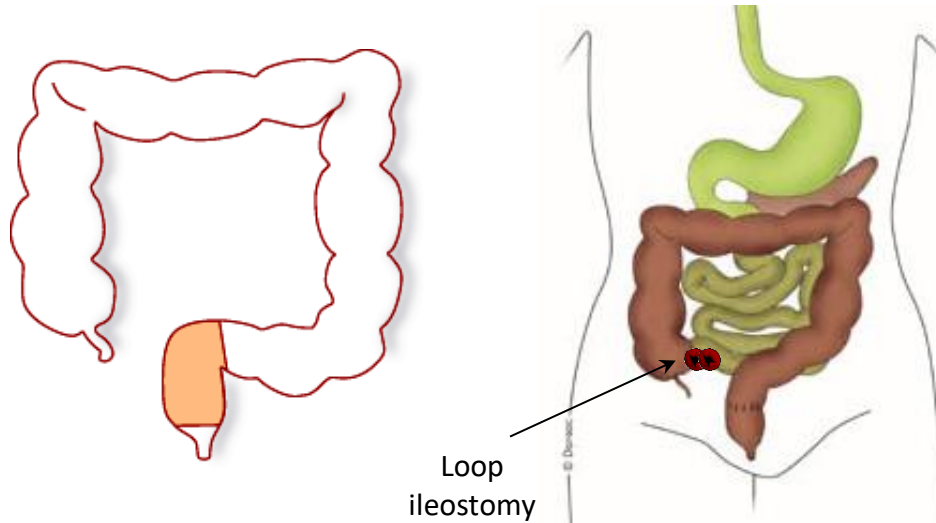
Closure of rectal stump

Reason for surgery	Patient's outcome	Care of this patient
<p>The sigmoid colon is removed due to:</p> <ul style="list-style-type: none"> <li>• Diverticulitis</li> <li>• Sigmoid cancer</li> <li>• Fistulae</li> <li>• Volvulus</li> <li>• Perforation</li> </ul> <p><b>ON MOST OCCASIONS, THIS IS AN EMERGENCY PROCEDURE</b></p>	<p>Patient will have an end colostomy in the left iliac fossa.</p> <p>This stoma can be reversed at a later date, but patients may decide not to have the reversal surgery.</p> <p>Dissolvable sutures to stoma.</p> <p>The top of rectum is sewn off and put back into the pelvis; this is called a rectal stump.</p> <p>Laparotomy wound present.</p>	<p>Patient may have feelings of wanting to open their bowels normally and may pass mucus or old stool.</p>

## Reversal of Hartmann's Procedure

Reason for surgery	Patient's outcome	Care of this patient
<p>To re-establish bowel continuity.</p> <p>Most patients would have had their stoma for between 6 to 18 months.</p>	<p>The stoma will be closed, and patient's bowel restored.</p> <p>It is normal for the patient to experience diarrhoea or constipation.</p> <p>Patient will have had their old laparotomy wound re-opened.</p> <p>Small scar present where old stoma site was.</p> <p><b>Remember:</b> the patient's rectum has been made redundant for many months. It takes time to establish a bowel pattern.</p>	<p>Reassurance must be given during this time.</p> <p>The patient may experience:</p> <ul style="list-style-type: none"> <li>• Urgency</li> <li>• Incontinence</li> <li>• Tenesemus</li> </ul> <p>Warn the patient that they may experience leakage from their anus at night when asleep - provide pads and commode by the bed.</p> <p>Loperamide 2mg, when required, can be used to slow the bowel down, making the stool thicker.</p> <p>Reassure patient that they will see improvement with their bowel function, but this may take weeks/months.</p>

## Low Anterior Resection

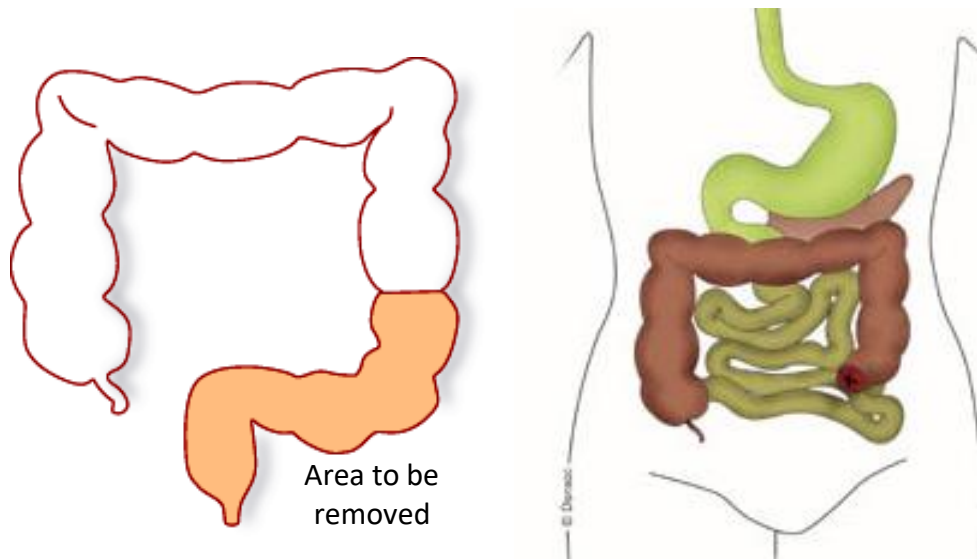


Reason for surgery	Patient's outcome	Care of this patient
<p>To remove a rectal cancer.</p> <p>Cancers situated 4-6cm and above the anal margin. The upper part of rectum is removed, and an anastomosis is performed.</p> <p>Many of these patients have had long-course chemotherapy / radiotherapy pre-operatively to shrink the cancer before surgery.</p>	<p>Most of these patients will have a temporary covering loop ileostomy in the right iliac fossa to protect the low anastomosis.</p> <p>Laparotomy / laparoscopic wound.</p> <p>Patient may have feelings that they want to open their bowels the normal way, as they still have some rectum and sphincters.</p>	<p>Patient may pass discharge/mucous from the anus.</p> <p>Encourage patient to sit on the toilet, they may pass mucus.</p> <p><i>Warning:</i> nothing to be administered per rectum due to the low rectal anastomosis.</p>

## Reversal of Loop Ileostomy post Low Anterior Resection

Reason for surgery	Patient's outcome	Care of this patient
<p>To re-establish bowel continuity.</p> <p>Most patients would have had their stoma for between 3 to 12 months.</p>	<p>The stoma will be closed, and their bowel will be restored.</p> <p>It is normal for the patient to experience diarrhoea.</p> <p>Bowels may be opening between 3 to 6 times per day.</p> <p><b>Remember:</b> most of the rectum would have been removed and therefore bowel capacity has decreased.</p>	<p>Reassurance must be given during this time.</p> <p>The patient may experience:</p> <ul style="list-style-type: none"> <li>• Urgency</li> <li>• Incontinence</li> <li>• Tenesemus</li> </ul> <p>Warn the patient that they may experience leakage from their anus at night when asleep - provide pads and commode by the bed.</p> <p>Loperamide 2mg, when required, can be used to slow the bowel down, making the stool thicker.</p> <p>Reassure patient that they will see improvement with their bowel function, but this may take weeks/months.</p>

## Abdominoperineal Excision of the Rectum (APER)

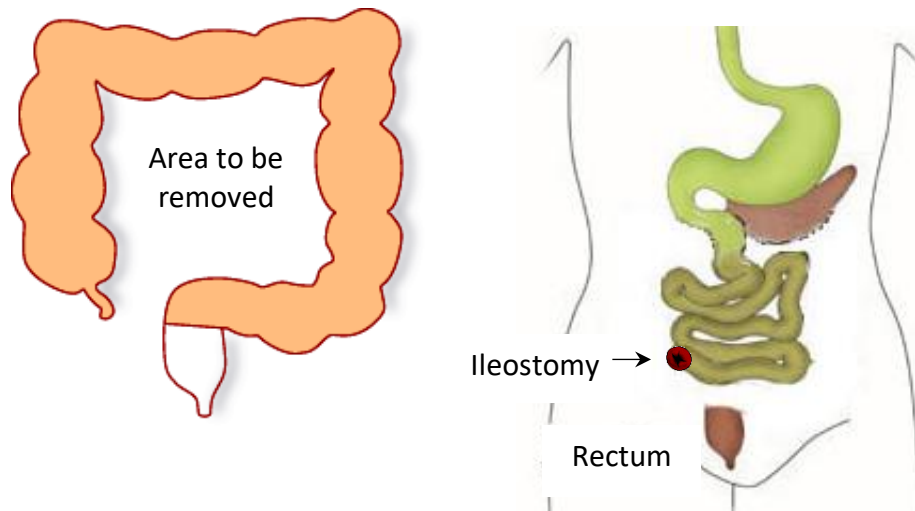


Reason for surgery	Patient's outcome	Care of this patient
<p>To remove a low rectal cancer.</p> <p>Inability to preserve the internal and external sphincters.</p> <p>Many of these patients have had long-course chemotherapy / radiotherapy pre-operatively to shrink the cancer before surgery.</p>	<p>Permanent end colostomy in the left iliac fossa.</p> <p>Dissolvable sutures to stoma.</p> <p>Laparotomy / laparoscopic wound.</p> <p>Perineal wound.</p>	<p>Perineal wound must be observed.</p> <p>This wound has a high chance of breaking down due to pre-operative radiotherapy treatment.</p> <p>Encourage showering twice a day.</p> <p>It is not uncommon to have phantom rectal discomfort –reassure patient.</p>

## Defunctioning Loop Colostomy

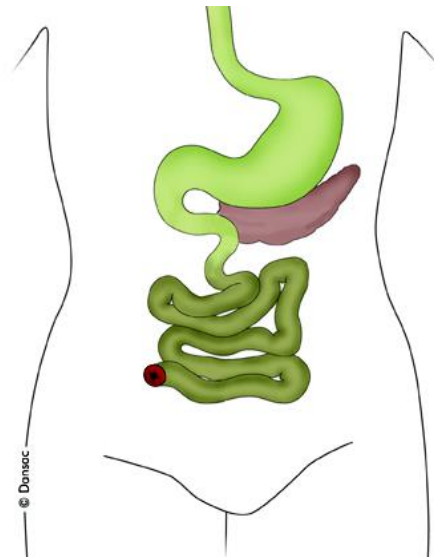
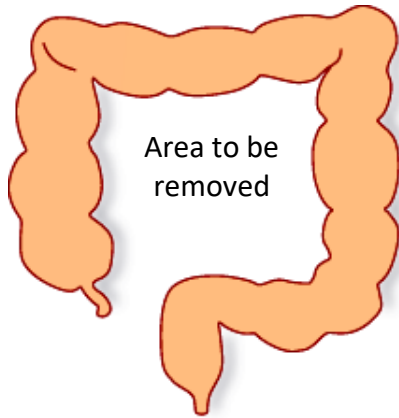
Reason for surgery	Patient's outcome	Care of this patient
<p>Patient presents with a rectal cancer that is causing obstruction of the bowel and therefore the patient is unable or having difficulty opening their bowels.</p> <p>This is a quick procedure where the surgeon pulls out a loop of descending or sigmoid colon where patient has been pre-operatively sited.</p>	<p>Loop colostomy formed in the left iliac fossa to allow the bowel to function.</p> <p>The bowel is therefore de-functioned above the rectal cancer.</p> <p>No laparotomy wound present.</p>	<p>It is very likely that the patient will experience rectal loss of mucus, stool, or old blood.</p> <p>This is normal and the patient should be encouraged to sit on the toilet.</p>

## Subtotal Colectomy



Reason for surgery	Patient's outcome	Care of this patient
<ul style="list-style-type: none"> <li>• Ulcerative colitis</li> <li>• Perforation of the large bowel</li> <li>• Multiple large bowel cancer</li> <li>• Loss of blood supply to bowel, post cardiac episode (ischaemic bowel)</li> </ul> <p>The large bowel is removed, leaving the preserved rectum in situ.</p>	<p>The patient will have an end ileostomy in the right iliac fossa.</p> <p>Laparotomy / laparoscopic wound present.</p> <p>Rectal stump is over-sewn and left in the pelvis.</p> <p>Possible opportunity for a later stage ileo-anal pouch procedure.</p>	<p>Patient may have feelings of wanting to open their bowels normally and may pass mucus or old stool.</p> <p>Reassure patient.</p>

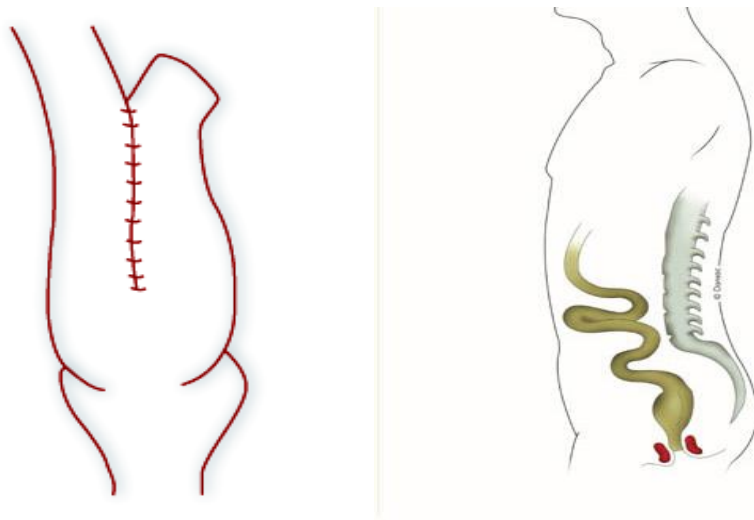
## Panproctocolectomy



Reason for surgery	Patient's outcome	Care of this patient
<ul style="list-style-type: none"> <li>• Ulcerative colitis</li> <li>• The entire large bowel and rectum is removed.</li> </ul>	<p>The patient will have a permanent end ileostomy in the right iliac fossa.</p> <p>Dissolvable sutures to stoma.</p> <p>Laparotomy / laparoscopic wound.</p> <p>Perineal wound.</p>	<p>Check perineal wound on day 2 - dissolvable sutures in situ.</p> <p>This wound has a high chance of breaking down due to previous steroid treatment.</p> <p>The patient is to be encouraged to shower the peri-anal area twice a day.</p> <p>The patient may experience phantom rectum pain.</p> <p>Reassure patient.</p>



## Internal Ileo-Anal Pouch Procedure



This procedure is carried out only for those patients with an ulcerative colitis (UC) or Familial Adenomatous Polyposis (FAP) diagnosis.

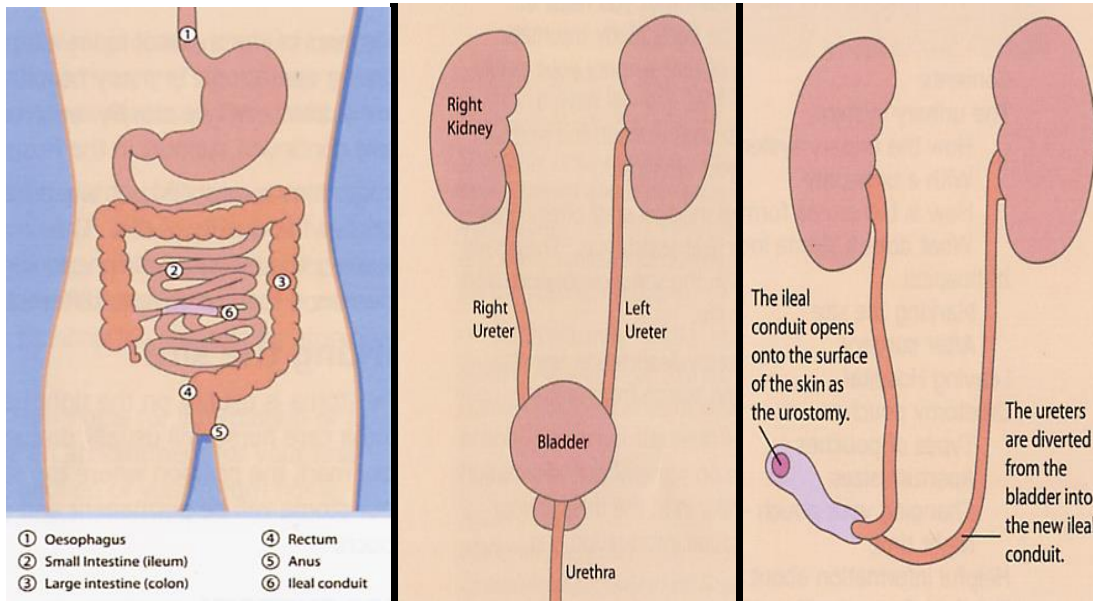
Careful pre-operative counselling by the Stoma Care Nurse Specialist would have taken place prior to the procedure.

Reason for surgery	Patient's outcome	Care of this patient
<ul style="list-style-type: none"> <li>• Ulcerative Colitis</li> <li>• Familial Adenomatous Polyposis</li> </ul>	<p>The patient will have a temporary loop ileostomy in the right iliac fossa.</p> <p>Dissolvable sutures to stoma.</p> <p>Laparotomy / laparoscopic wound.</p>	<p>The patient may leak from either their rectal stump after the 1<sup>st</sup> operation of Stage 3 or leak faecal fluid after the 2<sup>nd</sup> operation of Stage 3.</p> <p>Twice daily showering of perineal area during all stages of pouch procedure to prevent excoriation.</p>

This procedure is carried out in a 2 or 3 stage procedure:

2 STAGE PROCEDURE	3 STAGE PROCEDURE
<p><b>1<sup>st</sup> Operation</b></p> <ul style="list-style-type: none"> <li>Subtotal Colectomy and formation of the ileo-anal pouch with a covering loop ileostomy to protect the anastomosis.</li> </ul> <p><b>2<sup>nd</sup> Operation</b></p> <ul style="list-style-type: none"> <li>Reversal of loop ileostomy and continuity restored to the lower bowel.</li> </ul>	<p><b>1<sup>st</sup> Operation</b></p> <ul style="list-style-type: none"> <li>Patient has a subtotal colectomy.</li> <li>The rectum and sphincters are left in situ.</li> <li>Patient has an end ileostomy.</li> </ul> <p>The patient then recovers to a good standard nutritionally and stops taking steroids. This may take between 3 to 6 months.</p> <p><b>2<sup>nd</sup> Operation</b></p> <ul style="list-style-type: none"> <li>The rectum is removed down to the pelvic floor.</li> <li>Creation of the ileal pouch and anastomosis to the anus.</li> <li>The patient will then have a loop ileostomy formed, to protect the anastomosis.</li> </ul> <p><b>3<sup>rd</sup> Operation</b></p> <ul style="list-style-type: none"> <li>Reversal of loop ileostomy, which then restores continuity of the lower bowel.</li> <li>Small bowel contents will be produced from the pouch up to 6x per day in the early days.</li> </ul> <p><b>Warning:</b> nothing to be inserted per rectum unless requested by surgeon.</p>

## Ileo-Conduit or Urostomy



Reason for surgery	Patient's outcome	Care of this patient
<ul style="list-style-type: none"> <li>• Bladder Cancer</li> <li>• Dysfunctional Bladder</li> <li>• Congenital Disorder</li> </ul> <p>The surgical procedure to remove the bladder is called a cystectomy and formation of an ileo-conduit.</p>	<p>A permanent ileo-conduit / urostomy is formed in the right iliac fossa.</p> <p>Dissolvable sutures to stoma.</p> <p>2 stents (if patient has two kidneys) will be inserted into the ureters and conduit post-operatively.</p> <p>The Stoma CNS removes these from day 14 onwards.</p> <p>Laparotomy wound present.</p> <p>Stoma mucus.</p>	<p>Stents are used to keep the ureters patent and the conduit draining. They tend to fall out by day 14 – refer to Stoma CNS for advice.</p> <p>Remember: there will be mucus present around the stoma and in the bag. This is natural for the stoma to secrete, as it is the small bowel. This is not a sign of infection.</p>

## Glossary of Terms

<b>ANASTOMOSIS</b>	A surgical joining of the bowel created by the surgeon (e.g. two ends of the bowel being joined).
<b>COLOSTOMY</b>	A surgical operation in which a part of the colon is brought through the abdominal wall to create an artificial opening (stoma).
<b>ILEO-ANAL POUCH</b>	A reservoir made from loops of ileum to replace a surgically removed rectum, avoiding the need for a permanent ileostomy.
<b>ILEO-CONDUIT (UROSTOMY)</b>	A segment of small intestine (ileum) is used to convey urine from the ureters to the exterior (stoma) into an appliance.
<b>ILEOSTOMY</b>	The ileum is brought through the abdominal wall to create an artificial opening (stoma).
<b>LAPAROTOMY</b>	A surgical incision into the abdominal cavity. The operation is performed to examine the abdominal organs as a help to diagnosis.
<b>STOMA</b>	A Greek word for an 'opening'. The artificial opening of a tube (e.g. the colon or ileum) that has been brought through the abdominal wall.
<b>TENESMUS</b>	A sensation or the desire to defecate, which is continuous or recurs frequently, without production of significant amounts of faeces.