Letterkenny University Hospital
Understanding Stoma Reversal
Patient Information Booklet

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Letterkenny General Hospital

Acknowledgements for review of this publication
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Funding for this publication is from patient donations
# Table of contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding stoma reversal</td>
<td>5</td>
</tr>
<tr>
<td>The digestive system</td>
<td>6</td>
</tr>
<tr>
<td>Stoma reversal is considered</td>
<td>7</td>
</tr>
<tr>
<td>Important facts about stoma reversal</td>
<td>8</td>
</tr>
<tr>
<td>Preparation for stoma reversal surgery</td>
<td>9</td>
</tr>
<tr>
<td>The surgery</td>
<td>12</td>
</tr>
<tr>
<td>On discharge</td>
<td>13</td>
</tr>
<tr>
<td>Preparation for discharge from hospital</td>
<td>14</td>
</tr>
<tr>
<td>Common concerns</td>
<td>15</td>
</tr>
<tr>
<td>Advice on managing bowel pattern after reversal</td>
<td>17</td>
</tr>
<tr>
<td>Managing problems</td>
<td>20</td>
</tr>
<tr>
<td>Complications</td>
<td>22</td>
</tr>
<tr>
<td>Glossary</td>
<td>23</td>
</tr>
<tr>
<td>Contact details</td>
<td>25</td>
</tr>
</tbody>
</table>
Introduction

This information booklet explains to patients and carers about stoma reversal of colostomy or ileostomy. This information is based on best practice that is available and takes into consideration the experiences of patients. This booklet also provides information on types of stoma reversal, how you can prepare for surgery, what to expect after surgery including managing your bowel function. It also explains some of the problems and potential complications that can occur.

Hopefully you will find this booklet informative and reassuring with realistic expectations about the surgery. It is not intended to be a comprehensive guide but should encourage you to ask questions and seek further information from health care professionals. It should also assist you and your family to make an informed decision about surgery and help you in adjusting to your bowel pattern after stoma reversal.

Reversal of a stoma

Stoma reversal is when the bowel that is used to form the stoma is reconnected to the remainder of the bowel. This procedure is often referred to as closing of the stoma.

Patients often look forward to the reversal of the stoma and see it as a return to normal. It is important to be aware that the bowel pattern will possibly be different. Generally people adapt to a new normal routine for their bowels and manage very well.

In general the surgery is considered to be more straightforward and much shorter than the initial surgery but it is also important to be aware of problems and understand the risks of complications that can occur.
The digestive tract is a hollow tube that runs from your mouth to your anus. It is approximately 18 metres long.

A stoma is a surgically created opening of the bowel onto the abdominal wall, allowing waste (faeces or urine) to drain into an appliance or stoma pouch.

A stoma is formed from a loop of bowel or from the end of the bowel.

A stoma formed from the colon (large bowel) is a colostomy. A stoma formed from the ileum (small bowel) is an ileostomy.
Stoma reversal is considered with

**Loop Colostomy**
This is formed from a loop of large bowel brought out on to the outside of the abdomen. It is usually positioned on the upper right of the abdomen or the left side of the abdomen.

**Loop Ileostomy**
This is formed from a loop of small bowel brought out on to the outside of abdomen. It is usually positioned on the right side of the abdomen.

**Total Colectomy**
This involves removal of the large bowel, leaving the rectum in place and an end ileostomy is usually performed. This can be reversed when you are considered for pouch surgery.

**J Pouch/Pouch Surgery**
This is removal of all the large bowel leaving the rectum but forming an internal pouch by connecting the small bowel (ileum) to the back passage. This is major bowel surgery.

**Hartmans Surgery**
Hartmans stoma reversal is reversal of an end colostomy. This is major surgery and involves connecting the functioning end of the colon which is the stoma to the lower end of the bowel. A temporary loop stoma (generally an ileostomy) may be required for a few months to allow the join in the bowel to heal. This join in the bowel is called the anastomoisis.
Important facts about stoma reversal

Stoma reversal is unsuitable

- If your back passage has been removed.
- If you are not physically/medically fit for the operation.

Between 8 and 10 percent of patients planned for stoma reversal decide to keep their stoma.

If stoma reversal is a suitable option for you

The consultant surgeon will also need to determine the following:

- That the bowel left in place is healthy and that there is no persistent bowel disease.
- That there is no narrowing of your bowel.
- That the suture line where the bowel is joined together is healed.
- That you are physically/medically fit and in good general health to have an operation.
- That the anal sphincters are working. These are the muscles around the back passage that control the flow of faeces and flatus (wind) from the bowel, thereby controlling continence.

When the stoma will be reversed

This depends on the consultant surgeon and factors to be considered include:

- Length of time you have a stoma.
- Your general health.
- Your recovery from the initial surgery as well as the reason for the surgery.
- If you are having further treatment such as chemotherapy or radiotherapy, this will also delay the stoma reversal. The treatment needs to be completed for several weeks prior to stoma reversal.

Temporary stomas are created for a minimum of six weeks and can be present for up to a year and longer depending on circumstances.

It is very important not to focus on having the stoma reversed in order to avoid disappointment. Surgery can be delayed or cancelled for different reasons.
The following examinations may be necessary before stoma reversal

- Rectal examination - this is an examination of your back passage where the consultant surgeon inserts a gloved finger into your back passage.
- Colonoscopy - this is an examination of the bowel with a colonoscope which is a long flexible tube inserted into the back passage.
- Sigmoidoscopy - this is an examination of the lower part of the bowel with a small flexible tube inserted into the back passage.
- X-ray studies - such as gastrografin enema which involves dye being inserted into the bowel through the back passage and x-rays are taken.
- CT scans - this is computerised tomography (C.T.) that produces specialised and more detailed x-ray images of the body.
Diet and fluids
It is advisable to eat a well-balanced diet with a variety of foods that contain protein, fat, carbohydrates and include fruit and vegetables. Ensure your fluid intake is adequate with 8 to 10 glasses of water a day as an average. The food pyramid below is a guide.

Exercise
It is important to stay as active as possible with regular daily exercise.

Psychological and emotional health
It is important to prepare yourself psychologically for the surgery as sometimes people can worry about getting back their normal routine after stoma reversal.

Anaesthetic review
To prepare for the operation you will need to attend the pre-operative assessment clinic for review by the anaesthetist as you did prior to your first surgery.
Pelvic floor exercises
There are two rings of muscles around your back passage or anus called anal sphincters. These muscles form part of the pelvic floor and control the flatus and stool from your bowel. Practicing your pelvic floor exercises at least 20 times daily is really important. These exercises should be considered after your first surgery and you will be given instructions by the clinical nurse specialist or physiotherapist. These exercises help keep the muscles around the back passage strong when they are not in use with your stoma. These muscles are essential for bowel control after stoma reversal.

Pre-operative bowel preparation
The bowel preparation depends on your consultant surgeon. You will be informed of what type of preparation you require by your consultant surgeon or clinical nurse specialist.

The following is a guide:
If you have a colostomy you may be given a strong laxative to clear out your bowel. This will cause your bowel motions to become very loose and it is advisable to wear a drainable pouch.
If you have an ileostomy you will not receive an oral laxative.

You may also be given an enema through the back passage to clear out the lower end of the bowel on the morning of surgery.
The surgery
This may be performed through keyhole surgery or open surgery. It may involve the surgeon making a small incision at the stoma site or reopening the original abdominal scar.

After surgery
In the immediate recovery period you may have one or more of the following:
- Oxygen mask/nasal prongs for your breathing.
- Urinary catheter in your bladder for passing urine.
- Drip in your arm or neck for fluids.
- Pain relief through a special pump - patient controlled analgesia pump. This pump will give you pain relief through a needle in your hand and you will be able to control the amount of pain relief you receive. You will be instructed on how to use this pump.
- Epidural (small catheter in your back for continuous pain relief).

Recovery from the surgery
Recovery from the surgery will depend on the type of stoma reversal. You may be allowed to drink fluids the day after surgery and gradually you will progress to a light diet and you will also be advised by your consultant surgeon and clinical nurse specialist.

When the bowel starts to work after reversal
An indication that the bowel is starting to work after surgery is when you pass flatus (wind). Your tummy may feel bloated after surgery and your bowel will usually start to work within one to three days and then you will usually be able to leave the hospital. In the initial days after reversal your bowel motions will be erratic with frequency, urgency, loose motions or constipation.

This is normal after stoma reversal surgery and should improve with time but if you have any concerns after discharge it is important you contact a member of the health care professional team.
Preparation for discharge from hospital

The hospital stay
Your hospital stay will be approximately 4 to 7 days and this will depend on your recovery and the type of stoma reversal.

Discharge from hospital
After the surgery you may be tired so it is important to take adequate rest. Your plans for discharge will be discussed with you at the pre operative assessment. If you think you need convalescence or home support on discharge from hospital inform the clinical nurse specialist or ward manager.

Wound care
- You may be given specific advice on discharge in relation to the care of your wound.
- You may have a wound at the stoma site and/or a wound in the previous surgery site on your abdomen.
- The stoma site wound may be redressed on a regular basis to allow it to heal gradually from below the surface of the wound.
- If you have stitches or clips, these are usually left in place for 10 to 14 days after surgery and arrangements will be made to have them removed after discharge.
- A dry dressing covers the wound until the stitches/clips are removed. Usually it is safe to get the wound wet when having a bath/shower unless otherwise advised. It is advisable to avoid the use of shower gels until the wound is fully healed.

If you notice any fluid or redness around the wound site or from the stoma site inform your doctor as soon as possible.
After discharge from hospital

It is important to contact your doctor as soon as possible if you experience any of these symptoms

- Progressive and worsening abdominal (tummy) pain
- Increased bloating and abdominal discomfort
- Persistent nausea and vomiting
- High temperature
- Night sweats
- Breathing difficulties
- Feeling generally unwell
- Difficulty with eating and drinking
- Persistent loose stools and diarrhoea
- Difficulty with passing urine
- Very watery motion and your tummy feeling very bloated

Important Advice

Should you need further surveillance of your bowel and require further colonoscopy. It is advisable to wait at least 2 months after stoma reversal. This can be clarified with your clinical nurse specialist or the consultant surgeon.
Common Concerns

Concerns you may have after stoma reversal

- Feeling insecure about getting back to previous pattern of life.
- Faecal incontinence and being able to get to the bathroom on time.
- The impact on sexual relationships and intimacy.
- Changes in bowel pattern.

Changes in bowel pattern may include:

- **Frequency** - that is the amount of times you have your bowels open in a day.
- **Urgency** - a sudden need to go to the toilet to have your bowels open.
- **Diarrhoea** - that is a much looser or more watery motion.
- **Passing of small amount of stool more often.**
- **Incomplete emptying of the bowels after each bowel motion.**
- **Bowel active at night.**
- **Leakage of stool** - from your back passage causing incontinence.
- **Unsure whether you need to pass wind or stool.**
- **Constipation.**
- **Feeling of constantly wanting to pass stool.**
- **Anal excoriation** - which is sore skin around the back passage.

All of these concerns are completely normal. Your confidence and self-esteem will improve in time. It is important to remember that you are not alone on this journey and health care professionals want to ensure you are supported and informed.

For some people their bowel pattern returns to almost normal in a short time frame. For others, especially for those who have had radiotherapy and rectal surgery their bowel pattern may be irregular for weeks to a year after surgery and even longer for some people.
Rest and Exercise

- After any surgery you may feel tired so it is important to take regular rest and to gradually build up your activity levels with gentle exercise.
- Sports and activities may be resumed approximately 6 to 8 weeks after surgery but it is important that you are guided by the way you feel and take advice from the health care professionals.

Avoid heavy lifting

It is important to avoid heavy lifting or straining for approximately 6 to 8 weeks after surgery as it affects your abdominal muscles. Lifting after surgery increases the risk of getting a hernia which is caused by weakness of the abdominal muscles. A hernia occurs when some of the bowel protrudes through a weakness in the muscle wall of the abdomen causing a swelling beneath the skin of the abdomen.

Driving

- It is advisable not to drive until at least 6 weeks after your surgery as internal healing is taking place. Your doctor will give you the appropriate advice.
- You may need also to check with your motor insurance for clarity on your policy cover after surgery.

Returning to work

- As with any major surgery it will take time to recover and this can be from 6 to 8 weeks.
- Each person is individual and depends on the initial reason for surgery and your occupation.
- Returning to work on a part time basis may also be an option.
- Check with your doctor before returning to work.
**Diet**

There is no special diet after stoma reversal unless advised by a member of the health care team. Smaller portions more often may be beneficial in the first few days after surgery and then progress to a balanced normal diet.

A balanced diet should include starchy carbohydrates (bread, rice, pasta, potatoes) fruit, vegetables, dairy products, (milk, cheese, yoghurts,) meat, fish and eggs with an adequate fluid intake.

It is advisable to start on a low fibre diet after surgery especially if the bowel motions are loose as fibre can cause the stools to be looser and increase flatus. Gradually increase the fibre intake when your bowel motion start to settle.

Caffeine, alcohol, sugary drinks or sorbitol (found in sugar free drinks) can lead to looser stools and bloating. When symptoms start to settle you can re-introduce them into your diet, starting with small amounts initially.

It is only by trial and error that you will identify the foods you are able to tolerate. A referral to the dietician can be arranged if you require more specific advice.

**Pelvic floor exercises**

The sphincter muscles around the back passage can become weak as a result of the surgery and when not in use. You will have been advised on these exercises from your initial surgery. These exercises should be continued after your stoma reversal and it is advisable to continue them for the longer term. **Squeezing the muscles** of the back passage (as through you were trying to stop wind) **holding** for 5 to 10 seconds and then rest for 10 seconds. Repeat at least 5 times. Progress the exercise by increasing the hold gradually. A second exercise is **to tighten the muscles of the back passage as quickly as you can** and then **relax** and then **tighten** again quickly. Pelvic floor exercises can be done **sitting, standing** and also **lying** on your back with your legs bent up and feet flat.

Remember good posture at all times and when doing your exercises improves and strengthens the anal sphincter muscles and helps bowel control.

A referral to a physiotherapist can be arranged for further advice.
Medications
Sometimes medication is necessary to help to regulate the bowel pattern. It is important to speak to doctor/consultant surgeon or clinical nurse specialist for the appropriate advice.

The main types of medication which are often used:
- Anti-diarrhoeal which help to slow down the bowel motions and should be taken 30 minutes before food.
- Bulk forming medications which add fibre to the stool and make it more bulky and easier to control.
- Other medications that might be of benefit.
**Skin Care**

You may experience frequency of bowel motions and the skin around your back passage may become excoriated. Wash this area with warm water or moist wipes and dry after each bowel movement. Protecting your underwear and wearing a pad may give you confidence and may be necessary for a short time.

The use of a barrier cream around the back passage may help minimize skin problems.

**Toilet habits**

- It is advisable to use the optimum sitting position on the toilet. Knees higher than hips, elbows on knees and straight spine. Using a stool for resting your legs may be helpful.
- It maybe necessary to use a squatting position to assist in emptying the bowels.
- If possible focus on relaxing when sitting on the toilet and even read a book or listen to music. Try to avoid excessive straining of the back passage and pelvic floor.

**Correct position for opening your bowels**

1. **Step One**  
   - Knees higher than hips
   - Lean forward and put elbows on your knees
   - Bulge out your abdomen
   - Straighten your spine

2. **Step Two**  
   - Knees higher than hips
   - Lean forward and put elbows on your knees
   - Bulge out your abdomen
   - Straighten your spine

3. **Step Three**  
   - Knees higher than hips
   - Lean forward and put elbows on your knees
   - Bulge out your abdomen
   - Straighten your spine

4. **Correct Position**
   - Knees higher than hips
   - Lean forward and put elbows on your knees
   - Bulge out your abdomen
   - Straighten your spine
Managing problems

**Constipation**
- Regular exercise is very important.
- When using the toilet lean forward and raise both feet on a stool.
- Try to maintain a routine for your bowels.
- Drink adequate fluids for you (8 to 10 glasses of water a day)
- Eat a balanced diet including protein, fat, carbohydrates, vitamins and minerals. **A glass of prune juice may be of benefit.**
- On occasions your doctor may have to prescribe a laxative which will increase your bowel activity.

**Diarrhoea**
- Drink plenty of fluids up to 8 to 10 glasses in the day and it is advisable to consider rehydration fluids on your doctor instructions.
- Reduce your fibre intake.
- Include foods containing carbohydrates such as pasta, white bread, potatoes, bananas, marshmallows and jelly babies to help to thicken the stool.
- If diarrhoea persists longer than 24 hours contact your doctor. You may have to give a stool sample to the doctor to rule out infection.
- You may be prescribed antidiarrhoeal medications or medications to thicken your stool such as bulking forming medications.
- **Important** if diarrhoea is accompanied by vomiting contact your doctor as soon as possible as you may require admission to hospital for rehydration.

**Urinary tract infections.**
- Frequency of urine can occur after major bowel surgery. It is advisable to drink plenty of fluids (8 to 10 glasses of water a day is an average).
- Passing urine frequently and associated burning or stinging may indicate a urinary tract infection, therefore it is advisable to contact your doctor.

**Abdominal discomfort**
This can occur after the surgery but should improve within a few days. You will be advised on pain relief prior to leaving hospital. If the discomfort persists see your doctor.
Anterior resection syndrome
This is a collection of bowel symptoms commonly experienced after rectal surgery. It is caused by reduced capacity for storing stool in the rectum and weakness of the anal sphincter muscles.

Other contributing factors include low anastomosis, pelvic radiotherapy chemotherapy and pre-existing bowel problems.

Symptoms include frequent bowel movements, incomplete emptying of bowels, incontinence, tenesmus and anal excoriation. These symptoms can be very distressing and people can feel isolated, depressed and controlled by their bowel.

Managing anterior resection syndrome
- It is really important that you discuss these symptoms with your health care professionals.
- Adjustment can be made with diet, medication, skin care and pelvic floor exercises.
- Referral to a physiotherapist may be appropriate.
- The use of anal plugs for the back passage may be beneficial.
- Some patients may be considered for anal irrigation and the clinical nurse specialist will give you the relevant information.

With appropriate advice and support, anterior resection syndrome can be managed successfully.
In any surgery there are risks which are associated with a general anaesthetic and the surgical procedure itself which will be discussed in detail with you by health care professionals.

Specific complications to stoma reversal:
Although the risks are small it is important you are aware of them. They include:

Anastomotic leak
This is a breakdown of the bowel anastomosis where the bowel is joined together and causes fluid or faeces to leak into the abdomen. Further surgery may be necessary and this could involve forming a temporary stoma. It may also settle with conservative treatment over a few days.

Anastomotic stricture
This is a narrowing in the diameter of the bowel. After stoma reversal this can lead to symptoms of incontinence and incomplete emptying of the bowel. These symptoms should settle in time but in some cases it is necessary to have a minor procedure to stretch the narrowed area of the bowel. On rare occasions further surgery is necessary if the narrowing is more severe.

Fistula formation
This is an abnormal opening between two different internal body organs and in this case from the bowel to the skin. Exudate may leak onto your skin. This should resolve in time.

Bowel ileus
This is when the bowel is slow to function after surgery. It usually settles with fasting and intravenous fluids. On rare occasions further surgery is necessary.

Temporary urinary and sexual function problems
This should improve with time but if it becomes a more significant issue referral to a specialist is required. It is essential to discuss these problems with your health care professionals.
Glossary of terms

**Anal irrigation**
This is a procedure that involves inserting water into the back passage using a rectal tube. This assists in emptying the bowel thereby helping one gain control over their bowel function.

**Anal sphincter**
A muscle around the back passage which controls the passage of flatus and stool.

**Anus**
The external opening of the back passage.

**Anastomosis**
This the surgical procedure of joining the two ends of bowel.

**Anterior resection**
This is removal of the rectum which is the lower part of the large bowel inside the back passage.

**Anterior resection syndrome**
This a collection of bowel symptoms commonly experienced after rectal surgery including urgency, frequency incontinence, tenesmus and incomplete emptying of the bowel.

**Anastomotic stricture**
This is a narrowing in the diameter of the bowel. After stoma reversal this can lead to symptoms of urgency and incomplete emptying of the bowel.

**Barrier cream**
This is waterproof cream which is used to protect the skin.

**Chemotherapy**
This is the use of drugs for cancer treatment.

**Colon**
This is the large bowel and it is approximately 1.5 metre long. Its main function is to absorb water and salts and moves faeces along the bowel.

**Colostomy**
This is a surgically created opening in the large bowel where part of the bowel is brought out through the abdominal wall. The colostomy allows faecal material to pass through the stoma into a pouch/appliance.

**Colonoscopy**
This is an examination of the bowel with a colonoscope which is a long flexible tube inserted into the back passage.

** Continence**
This is the ability to control flatus, stool or urine.
Glossary of terms

Health Care Professionals
This includes consultant surgeon, general practitioner (GP), public health nurse, practice nurse, clinical nurse specialist stoma/colorectal, colorectal clinical nurse specialist, dietician, social worker, physiotherapist and pharmacist.

Ileum
This is a section of the small bowel.

Ileostomy
This is a surgically created opening in the small bowel. Generally the terminal ileum (last section of small intestine) is used to form the stoma. The stoma output consistency will vary depending on the location of the stoma within the small bowel.

A loop stoma
This is when a loop of intestine is brought out through an opening made in the abdominal wall to form a stoma.

Peri anal
This is the area around the back passage.

Rectum
This is lower part of the bowel just inside the back passage. Its main function is to act as a temporary storage site for faecal matter before it is eliminated from the body through the anus.

Stoma/colorectal clinical nurse specialist and colorectal clinical nurse specialist
A nurse who is a specialist in the care of patients with bowel function problems.

Tenesmus
The feeling of constantly wanting to pass stool.

Radiotherapy
This is the use of special equipment to send high doses of radiation to cancer cells. This is a local treatment and only affects the part of the body being treated.
The vast majority of people who have had their stoma reversed look forward to getting on with their lives without the stoma and they return to normal life.

It is important to note for other people their bowel pattern may never be the same as it was before the initial surgery but should improve to a pattern that is a new normal and manageable.

**Bowel function generally improves over time and can vary from weeks to months and even years for some people.**

There will also be a minority of people who have more significant bowel function problems after stoma reversal. They may need more support from health care professionals and may require further medical procedures.

Hopefully after reading this booklet you will have a better understanding of stoma reversal with realistic expectations about stoma reversal surgery.

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**Useful contacts:**
- Stoma Care/Colorectal Clinical Nurse Specialist
- Colorectal Clinical Nurse Specialist
- GP
- Consultant Surgeon
- Public Health Nurse

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**Disclaimer**

The information in this booklet has been compiled from professional resources and patient experience. Every effort has been made to provide accurate and expert information. There will not be acceptance of liability to any person or entity if there is loss or damage to any person caused directly or indirectly by the information contained within this document.