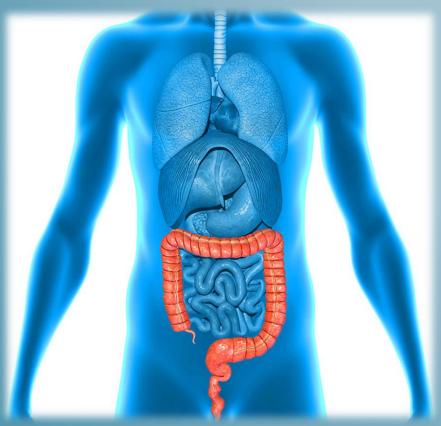


# How to care for and avoid complications





# The Role of The Digestive System

### Mouth

Food and liquid enter the body through the mouth. Chewing breaks down the food.

**Oesophagus** Carries the food and liquid to the stomach for digestion.

**3** Stomach Stores and breaks down the food into a liquid mixture before slowly releasing it into the small bowel.

**4** Liver Produces bile, which helps the body absorb fat from food.

**5** Gallbladder Stores bile until the body needs it.

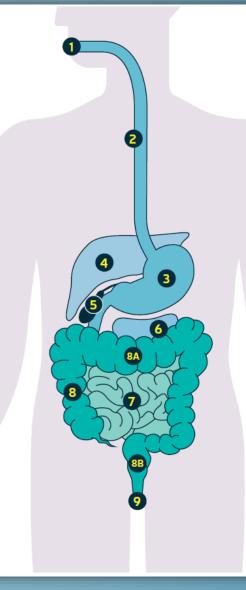
### 6 Pancreas

Produces enzymes (substances that speed up chemical reactions) that help the body digest fat, protein and carbohydrates (starchy foods).

**Small bowel** Breaks the food down even further, absorbing the nutrients into the body. Undigested waste moves into the colon.

Large bowel
Made up of the colon
(8A) and rectum (8B).
The body absorbs water
from the undigested
waste as it moves along
the colon towards the
rectum. Waste (poo)
is stored in the rectum
until it passes out of
the body.

**9** Anus Poo passes through the anus as it leaves the body.

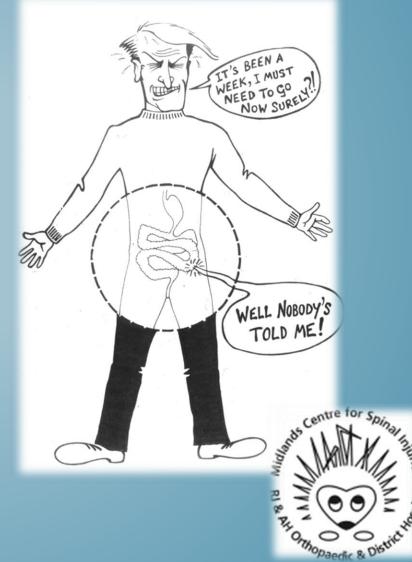




### https://www.youtube.com/watch?v=Og5xAdC8EUI

# What Happens To The Bowel Following A Spinal Cord Injury?

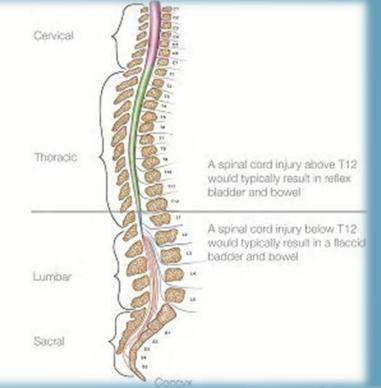
- After a spinal cord injury, nerve impulses that flow from body to brain and vice-versa cannot get through, due to the injury.
- Because of this, the urge to have a bowel movement is not there or to keep the sphincter close to prevent untimely stool passing through it.
- So proper planning, thinking, and timing is needed to prevent untimely passing of stool and to acquire bowel movement in a proper routine and time so that one can live a healthy and graceful life.



# What Happens To The Bowel Following A Spinal Cord Injury?

There are two types of neurogenic bowel that may develop from a spinal cord injury:

- Reflexic hypertonic bowel will continue to empty when stimulated, but you will lose the control you normally had from your brain. With this type of injury, the message telling you the bowel is full is not received; the muscle controlling the opening and closing of the anus stays tight. When the bowel gets full it empties automatically.
- Flaccid hypotonic bowel will not fully empty, even when stimulated. This is because the damage to the cord has damaged the pathways from the bowel wall into the reflex centre in the spine. Therefore, there cannot be any reflex action. That means your reflexes do not work normally and the anal muscles stays relaxed.





### How To Maintain Your Bowels

It is important to ensure that you take responsibility in your bowel care and direct your care if you require assistance by doing the following:

- Having a constant bowel routine at the same time each day.
- Ensure that your bowel is completely empty when bowel care is performed.
- Checking your stool to make sure it is normal.
- Maintain short and long term gastrointestinal health.
- Prevent complications such as constipation, incontinence, and autonomic dysreflexia.
- Bowel emptying within a 'reasonable time' 1 hour maximum
- Using minimum necessary physical or drug interventions.



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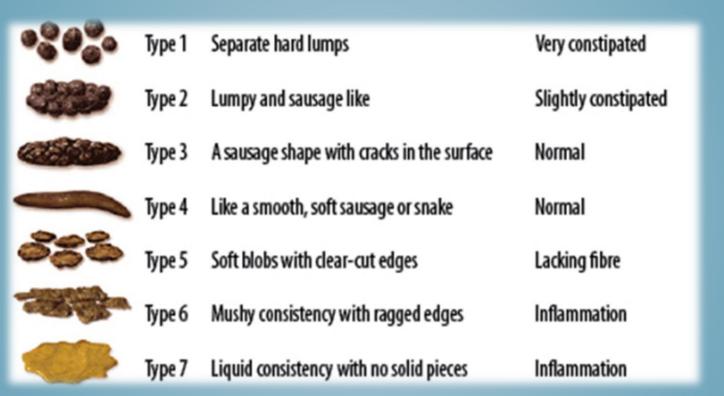
# Factors To Consider That Affect Bowel Management

- Previous medical history, particularly any pre-existing bowel condition.
- Pre-injury bowel habit.
- Current medication, which may affect bowel activity.
- The level of injury i.e. whether the patient has a reflex or flaccid bowel.
- Psychological and emotional factors
- Lifestyle





### **Bristol Stool Chart**





# **Potential Complications**

- Previous medical history, particularly any pre-existing bowel condition.
- Constipation
- Diarrhoea
- Haemorrhoids
- Tearing of the lining of bowel
- Anal Fissure
- Pressure sores
- Urine tract infections; urine incontinence
- Respiratory and cardiology complications due to push on diaphragm



# **Keeping The Bowel Moving**

An important part of bowel management is to emphasise on methods to encourage the movement of stool through the bowel. The following methods consist of:

- Exercise activities Physical activity promotes the colon to move stool along and avoids the potential of constipation.
- Diet and fluid intake What is eaten and when can have an impact on bowel function.
- Stimulating the bowel Eating and drinking starts the bowel moving the stool towards the rectum. It is recommended to empty the bowel.
- Oral laxatives Many SCI individuals may need to take some medication to aid the passage of stool through the colon. Using the trial and error method to suit the needs as everyone is different.





### **Removal of Stool**

When stool has reached the rectum, it may be that assistance would be needed to help empty the bowel. The following aspects may aid the evacuation process:

- **Posture** if you can be assessed and be suitable to transfer on a shower chair, then it is more effective as bowel activity is encouraged and the act of gravity can encourage the stool to empty from the bowel.
- Abdominal massage Kneading the abdomen from the bottom right, making your way across at around the umbilical level and down the left side. This action stimulates the colon to push stool towards the rectum.
- **Digital stimulation** By inserting a gloved, lubricated finger into the anus followed by a gentle circular motion of the finger for 20-30 seconds. During this time the finger should be in contact with the wall of the rectum and stimulation should only be done within a minute, no more. Remove the finger to allow the reflex contractions to move the stool down into the rectum.
- **Manual Evacuation** This involves the use of a finger to remove stool from the bowel to avoid incontinence or an impact bowel. This method is used when other methods have failed, or part of the bowel routine.
- Rectal Laxatives Medication such as suppositories or enemas that stimulate the lower bowel to empty.

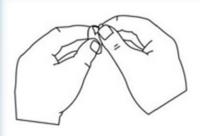


https://www.youtube.com/watch?v=O7cFvr3-DX8&feature=emb\_logo

# Suppositories

- Inserting suppositories can be daunting, but it is another stepping stone in gaining independence.
- If you cannot insert your own suppository, you can direct your care by guiding your carers in how to insert a suppository properly.
- Some patients use a suppository insert, nursing staff will advice and provide if it is recommended.





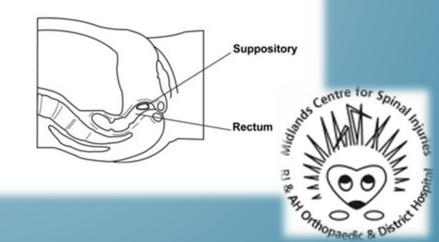
1. Remove foil wrapper.



2. Moisten the suppository with water or water-based lubrificating jelly (such as K-Y).



3. Lie on your left side and bend your right knee up toward your chest. Gently push the suppository into your rectum so it is deep enough not to come out.

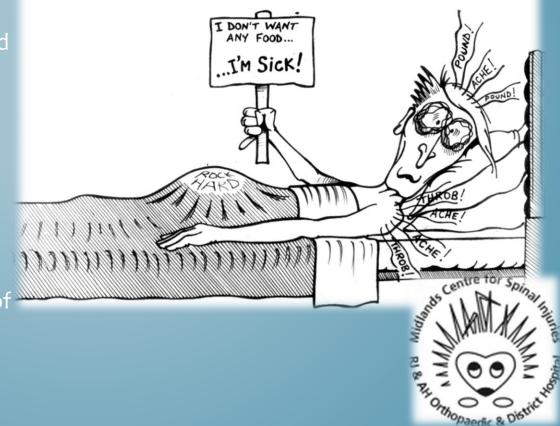




Constipation is the infrequent or difficult passing of hard stools. The stool become harder the longer it stays in the bowel because the water is absorbed from them. If not treated it can cause complete blockage of the bowel.

### Signs and symptoms include:

- Loss of appetite.
- Abdominal discomfort, feels hard and distended.
- Referred pain to shoulder tip.
- Headache and sweating (AD).
- Feeling sick or being sick
- Increased spasms.
- Change in bladder function.
- Overflow, a watery stool which can be mistaken for Diarrhoea.
- Passing none or small amounts of hard stool that is difficult to evacuate.



# Constipation

### **Causes of constipation include:**

- Diet lacking in fruit, vegetables and fibre
- Poor fluid intake.
- Small or irregular meals.
- Change in routine, e.g. bed rest.
- Irregularity in bowel management.
- Certain drugs Some antibiotics and painkillers.
- High temperature from infections such as UTI.
- Emotional or psychological upset such as bereavement.



### Treatment of constipation include:

- Increase the amount of fibre in the diet.
- Increase fluid intake.
- Increase alternate day bowel evacuations to daily until the problem has been resolved.
- Eat small meals regularly.
- Increase aperients and faecal softeners if already using them.
- Introduce aperients or softeners into the bowel management routine.



## Constipation

### You can help prevent constipation by:

- Maintaining an effective routine if it works don't change it!
- Paying attention to diet.
- Where short-term lifestyle changes increase the risk of constipation, action to avoid the problem should be taken.
- While aperients are not always required, if they are needed they should be used regularly.
- It is important to maintain a balance between constipation and diarrhoea, and to aim for an appropriately formed stool at regular intervals. Constipation should not be used as a method for controlling the bowels; this inevitably results in more problems.
- A fluid intake of at least 2 litres daily should be taken regularly during the day and evening.
- If it is necessary to take antibiotics, painkillers or any other medication which affects bowel function, diet and aperients should be reviewed.







The term used for loose stools or more frequent stools than is normal for you.

### What causes diarrhoea?

- Eating spicy foods which you are unaccustomed to.
- Bowel infection form a virus or bacteria.
- Some medications such as antibiotics.
- Too much aperients such as Senna.

### What action should you take if you have diarrhoea ?

- Take a specimen of stool to your GP to ensure that you do not have an infection.
- Take extra care of your skin as diarrhoea can cause skin breakdown around your back passage. Maybe go on bedrest and use barrier cream to protect the skin.
- Eat bland, low fibre foods while it persists.
- Increase fluid intake.

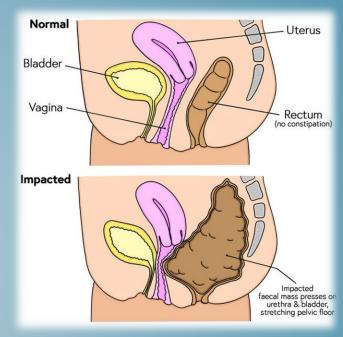
# DO NOT confuse constipation with overflow and diarrhoea





# Faecal impaction with overflow

- Faecal impaction occurs when the rectum, and often the lower colon, is full with hard or soft stool and the individual is unable to evacuate their bowel completely.
- It usually happens when there has been no adequate bowel movement for days, or weeks, and a large compacted mass of faeces builds up in the large bowel which cannot be passed.
- Liquid, Bristol stool chart type 6-7 stool, can leak around the mass. This happens between bowel movements, causing soiling of loose stool on clothing called faecal overflow incontinence/spurious diarrhoea.
- The leakage occurs with no awareness as the urge to defecate has been lost as a result of the distended rectum. The loose stool is often very offensive and the smell lingers.
- The large stool can be very painful and distressing to pass.
- If the constipation is not treated effectively and the bowel is completely emptied, the problem is likely to reoccur.





# Haemorrhoids (Piles)

Haemorrhoids or piles are swellings that contain enlarged blood vessels that are found inside or around the bottom (the rectum and anus). Active or inflamed haemorrhoids may rise the risk of AD during bowel management.

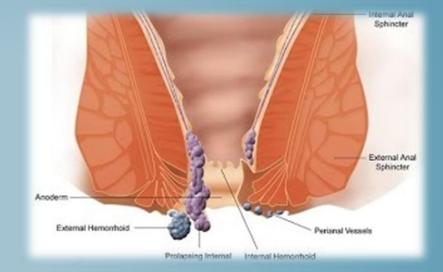
### What are the causes?

- Constipation.
- Poor circulation.
- Rough manual evacuation, including hard, dry stool.
- Nutrition low fibre diet.
- Obesity.
- Straining.

### What is the treatment?

- Treat and prevent constipation.
- Direct care so that manual evacuation is conducted gently using plenty of lubrication.
- Avoid excessive straining.
- Spend the least time necessary sitting on the toilet.
- Seek medical advice from GP who may prescribe creams or suppositories.

https://www.youtube.com/watch?v=-qX-NgyZmQA





### **Anal Fissure**

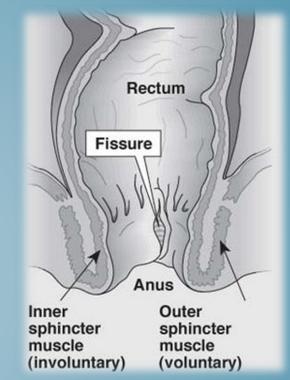
A small tear around the anus that can be caused by:

- Hard stool.
- Overstraining
- Being too rough during manual evacuation.

These tears can be very painful, but with a spinal cord injury person they may not be aware of it. They may notice an increase in spasms and AD may occur during bowel management and bleeding.

### **Prevention and Treatment**

- Use plenty of lubrication during manual evacuation.
- Ensure finger nails are always kept short.
- Remove jewellery from fingers.
- Ensure a trained person is performing the evacuation if you are unable to perform yourself.
- Keep the area clean and dry.
- Allow the fissure to heal.
- Consult the GP if it does not resolve or if it reoccurs.





### What are my options if unsuccessful?

Stoma

5. Nerve stimulation – sacral, anterior root

4. Antegrade colonic irrigation

3. Transanal irrigation

2. Rectal interventions – digital stimulation, digital evacuation, suppositories, small enemas

1. Routine, diet and fluids, lifestyle alterations, laxatives, constipating medicine

When your routine is not working then is the time to look for some other options after discussion with health care providers. Learning to manage your bowel following SCI is one of the most difficult things to cope with.

Your main aim is to establish an effective, straightforward routine to suit your life style and to prevent problems for occurring.

There is support available from MCSI, your GP, Community Nurses and other professionals.

