Bowel Management
A guide for patients

Key points

- The digestive system converts food into energy to build the body’s cells, and discards the waste products as faeces.
- Bowel contents move through the digestive system by a wave-like motion called peristalsis.
- Faeces are retained in the rectum until an appropriate time and place for defaecation (emptying). Defaecation prior to Spinal Cord Injury (SCI) is controlled voluntarily, i.e. the person knows when their rectum is full and can control emptying.
- After SCI this voluntary control is often lost and a neurogenic bowel results. The neurogenic bowel is no longer under brain control due to the communication breakdown caused by spinal cord damage.
- The aim of your bowel regime is to empty your bowel regularly and completely to prevent any bowel accidents.
- The neurogenic bowel may be flaccid or reflexic depending on the level of your injury.
- The SCI person will be independent in their bowel evacuation if physically able, or independently be able to instruct carers if not physically able.
- Many factors influence a successful bowel regime and each regime is individualised.
- Individuals with SCI above T6 are at risk of Autonomic Dysreflexia, if bowels are not managed effectively.
The digestive system

The digestive system converts food into energy and provides the body’s cells with the nutrients they need. It also discards waste products.

![Diagram of the digestive system]

Main functions of the structures

- **Mouth and tongue** – eating and chewing.
- **Pharynx and oesophagus** – swallowing.
- **Stomach** – storage and breakdown of food.
- **Liver, gallbladder and pancreas** – production, storage and release of chemicals and enzymes that help digestion, and the conversion of nutrients.
- **Small bowel (duodenum, jejunum, ilium)** – digestion and absorption of nutrients.
- **Large bowel (ascending, transverse, descending, sigmoid colon)** – water reabsorption, faeces formation.
- **Rectum and anus** – defaecation.
Food enters through the mouth and travels down the oesophagus into the stomach where enzymes start to break it down. Once it reaches the small intestine a rhythmic contraction of smooth muscles propels the contents through the digestive tract towards the rectum. This wave-like movement is called peristalsis.

Nutrients are absorbed into the body from the small intestine, which is about six metres long. The products which cannot be digested enter the large bowel as fluid, where water and some electrolytes are reabsorbed as it passes through. The speed which faeces passes through the large bowel determines the consistency of the stool - the slower the speed the harder the stool, as more fluid is absorbed.

Faeces are then stored in the rectum, the rectal walls expand to accommodate the faeces. Sacral nerves send a message from the rectum to the brain telling it the rectum needs to be emptied. The faeces continues to be retained in the rectum by the anal sphincter muscle remaining tight. This is under Voluntary Control. At an appropriate time and place (on the toilet) which the brain tells the rectal muscles to contract and the anal sphincter to relax, allowing faeces to be expelled.

**After spinal cord injury**

Initially after spinal cord injury spinal shock can result in the temporary loss of peristalsis. Once peristalsis recommences the digestive process is largely unchanged, that is until the bowel contents reach the large bowel.

Peristalsis however slower and therefore faeces take longer to move through into the rectum. This means that more water is reabsorbed, making the faeces harder.

Importantly, after spinal cord injury voluntary control is usually lost or impaired. This is known as a neurogenic bowel, a bowel affected by nerve impairment. Messages from the sacral nerves do not reach the brain, and defaecation is therefore no longer under brain control. The brain does not know when the rectum is full, and cannot initiate or control defaecation.
Neurogenic bowel regime

An effective bowel regime after SCI aims to prevent bowel accidents and other complications. A bowel regime is established where defaecation happens when initiated and not at any other time. Bowel regimes are individualised, but a typical regime may involve daily or second daily bowel evacuation in the morning prior to showering.

Successful bowel regimes incorporate the ‘Four R’s’:

- Faeces in the Right place – in the rectum
- At the Right time – in the morning for a morning regime
- With the Right consistency – not too hard or soft
- With a Reliable trigger – suppositories and/or anal stimulation or manual evacuation

The ‘trigger’ will depend on the type of neurogenic bowel. People with reflexes intact (usually in injuries T12 and above) will have a reflexic neurogenic bowel, and people with no reflexes will have a flaccid neurogenic bowel. The presence or absence of reflexes is determined by a bulbo cavernosal test.

Reflexic neurogenic bowel

Intact reflexes can be used in bowel evacuation. Suppositories release chemicals which irritate the rectal wall triggering it to contract to evacuate the bowel. Anal stimulation, a gentle rotation of a gloved, lubricated finger inside the rectum, similarly triggers this reflex. Therefore, a typical reflexic bowel regime may involve the insertion of suppositories and anal stimulation.

The gastro-colic reflex may also be utilised. This is the reflex that stimulates peristalsis after ingestion. Some people find having a hot drink before or during bowel treatment helps faeces move from the large bowel into the rectum for evacuation, thus speeding up bowel treatment and aiding complete emptying.

Flaccid neurogenic bowel

There are no reflexes intact, therefore the rectum is emptied by gentle manual evacuation. Sometimes straining or pressing on the lower abdomen helps (make sure bladder is not full first). Because of the lack of tone the sphincters may become lax over a period of time, risking faecal leak. Consequently bowel evacuation should be done daily, and sometimes twice daily is required.

Mixed neurogenic bowel

Occasionally people with injuries at the T11-L2 level have a mixed bowel, where some reflexes are intact and some are not. These bowel regimes are managed individually based on what function is present, using similar principles outlined above.
Becoming independent with bowel treatment

Independence in bowel treatment is an important part of the Rehabilitation Program. You should become independent in your bowel management, whether by independently performing your own bowel treatment or if you are physically unable to, independently instructing a carer to perform your bowel treatment.
Learning effective bowel treatment

Inserting suppositories and digital stimulation

- Prepare equipment.

- Wash hands, and open suppository packets. Put on gloves, take suppositories out of packet and put gel on them.

- Lying on left side, insert suppositories into rectum, against the rectal wall (not into the faeces). The suppositories will trigger the rectum to reflexively contract and begin to empty; this usually takes 15–20 mins to occur.
• Transfer onto commode (you may need a pan underneath) and go to the bathroom. Take a bag for rubbish. Position commode over the toilet.
• You may find a hot drink helpful (gastro-colic reflex).
• 15–20 mins after suppository insertion put on a clean glove, apply lubricant to finger and perform digital stimulation to aid emptying.

The procedure

• If there is no bowel action after 5 minutes post stimulation repeat gentle anal stimulation with lubricant. Dispose of gloves in bag.
• Once there is a bowel action, wait a few minutes then put on clean gloves and do a digital check with lubricant to ascertain if the rectum is empty.

• If there is faeces in the rectum repeat gentle anal stimulation and wait a few minutes, then recheck the rectum.
• The bowel treatment is complete only when the rectum is completely empty.
• Wash hands and dispose of rubbish.
Learning effective bowel treatment

**Manual evacuation**

- Prepare equipment.

![Equipment](image)

- Transfer onto commode and go to the bathroom. Take a bag for waste. Wash hands and put on gloves.

![Wash hands](image)

- Gently manually evacuate the rectum using lubricant and dispose of gloves in bag.

![Evacuation](image)

- The bowel treatment is complete **only** when the rectum is completely **empty**.
- Wash hands and dispose of rubbish.
Effective bowel regime

An effective bowel regime will help avoid bowel ‘accidents’, constipation, loose stools and diarrhoea. Many people, after spinal cord injury, will require the use of medications such as aperients to help obtain a good consistency of faeces and suppositories to evacuate the bowel.

Many other factors affect a bowel regime, including diet, level of exercise, medications, general health and lifestyle. An effective bowel regime is individualised, and as it involves many factors it may take some time to perfect. Trial and error is sometimes the only way to establish a regime, and some basic guidelines can help with this:

- Change **one** factor at a time.
- Allow time for effect to take place, this can take up to 7–10 days.
- **Patience**!

Remember: Regular complete emptying of the bowel is the best way forward

Aperients

Aperients, sometimes called laxatives, are medications that help avoid constipation, and can be used to assist the movement of faeces along the large bowel into the rectum. There are many different kinds, and they can work in different ways. Some examples of the ways aperients work are by:

- Softening the stool by drawing fluid into the bowel, making it easier to pass through the large bowel.
- Stimulating the large bowel to propel the faeces through.
- Stopping absorption of fluid from the stool in the large bowel making it bulky and easier to pass.

Some aperients are a combination of one or more types. Further information on aperients can be found in the Medications section.
Suppositories

There are two suppositories that are commonly used on the Spinal Unit:

- Glycerin – have a lubricant and mild stimulant effect.
- Bisacodyl – have a moderate stimulant effect.

Diet

Diet is very important in establishing an effective bowel regime. Adequate intake of fibre can help with stool consistency and propulsion through the large bowel, however following SCI high fibre intact is not recommended. Advice on diet and bowel treatment can be found in the Diet and Nutrition section.

Likewise certain food and drink such as curry, chilli, caffeine, alcohol, high fat can have an effect on stool consistency or irritate the bowel.

Other factors

General health and lifestyle can impact on your bowel regime. Any drastic change in exercise level can, for example, affect your regime. Similarly medication can affect stool consistency and can sometimes cause constipation or diarrhoea. Typically some pain medications can cause constipation, and some anti-biotics may cause diarrhoea.

Autonomic Dysreflexia

People with spinal cord damage at T6 and above are at risk from Autonomic Dysreflexia. Bowels are the second most common cause of Autonomic Dysreflexia, most commonly from an impacted bowel, but also from haemorrhoids or anal fissures.

The Autonomic Dysreflexia card has instructions on how to manage this medical emergency. Also refer to the Autonomic Dysreflexia section of this manual.

Therefore it is essential you maintain a good bowel management regime to prevent these complications.

Contact

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