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Southport & Ormskirk Hospital NHS Trust

NHS

PATIENT INFORMATION

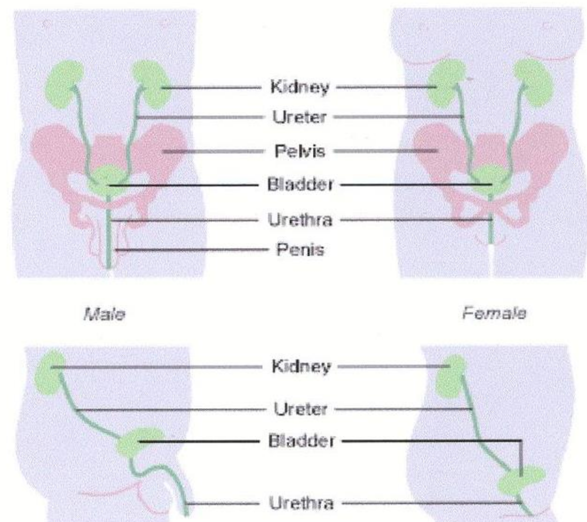
Bladder Management

North West Regional Spinal Injuries Centre

An integrated care organisation

HOW DID YOUR BLADDER NORMALLY WORK BEFORE YOUR SPINAL CORD INJURY?

Your urinary system is made up of various parts:



- Kidneys
- Ureters
- Bladder
- Urethra

Your kidneys filter waste products out of your blood and produce urine. The urine drains down the ureters to your bladder where it is stored. As the bladder fills, it expands like a balloon. This carries on until your bladder is full and it triggers a reflex signal in the nerve connections between your bladder and spinal cord.

This connection occurs at the sacral level (lower end) of the spinal cord. The sacral cord level (S2-4) is situated at approximately the same level as the bones of T 11-12 (the lower thoracic bones).

The spinal cord instructs your bladder to tighten or ***'contract'*** and squeeze the urine out. This happens ***automatically*** without conscious control from your brain. This is an example of a ***reflex*** act (an action that is controlled by the spinal cord and does not involve control by the brain).

At the same time, a message is normally sent up the spinal cord to your brain which makes you aware of the need to pass urine. The brain can normally ***override*** the reflex and control the urge to pass urine if the time and the place ‘is not’ appropriate.

If the time and the place ‘is’ appropriate, then the brain can consciously assist your bladder to relax and empty.

WHAT HAPPENS AFTER A SPINAL CORD INJURY?

Following an injury to the spinal cord, depending on the level and extent of damage, your bladder will normally respond in one or two ways:

- Reflex
- Flaccid

WHAT DOES A REFLEX BLADDER MEAN?

If your injury is at a ‘high’ level involving your upper trunk and/or neck (e.g. above T2 level) the nerves supplying your bladder are still intact but the control from your brain has been destroyed.

This means that your bladder muscles are still able to contract and relax resulting in what is known as ***involuntary voiding*** and varying amounts of urine being expelled from your bladder. As a result of this loss of control over your bladder, you may not be aware of when this is happening.

Even though the nerve supply is intact, there may be ***incomplete*** *emptying.* This is usually caused by an uncoordinated contraction and relaxation of muscles in your

bladder which take part in this process of passing urine (micturition). This is known as an ***unstable bladder*** and may mean that your bladder is not emptying fully every time you pass urine.

WHAT DOES A FLACCID BLADDER MEAN?

If your injury has been at a ‘low’ level (e.g. below T12 level) then the nerves which normally help your bladder to work have been damaged completely and therefore your bladder cannot contract or relax at all. This is known as a ***flaccid*** bladder and the preferred method of emptying is by you inserting a catheter into your bladder and emptying it completely. This is known as ***clean self-intermittent catheterisation.***

HOW WILL YOU MANAGE YOUR BLADDER?

By the time you leave hospital you will know the type of bladder management which is appropriate to your needs. It may be one of the following:

INDWELLING URETHRAL CATHETER

This method provides you with a system that continuously drains your bladder by way of a tube, which is passed through the urethra into your bladder and is held in place by a balloon, inflated by a small amount of water.

This is quite easy to care for and should be changed every 4-6 weeks (this can be done by your district nurse, carer, yourself or by returning to the Spinal Unit).

A problem with this method is that there is a potential risk of introducing infection and should only be used if there is no

alternative method of drainage.

DO

- Drink plenty of fluid (2 litres/day).
- Avoid getting constipated. Eat plenty of fibre.
- Maintain careful hygiene.
- Empty your drainage bag before it gets too full. If this happens it may cause leakage or pressure in your bladder and kidneys as urine builds up in the tubing.
- Use your thigh strap. This will support your bag as it fills and stop it dragging on your catheter.

DON'T

- Pull on the catheter as it will cause damage to your urethra.
- Lift the catheter above the level of your groin as this will cause urine to backflow and cause a build up of pressure in your bladder and kidneys.
- Allow the tubing to kink as this will obstruct the flow of urine.
- Disconnect the tubing from the drainage bag unless you need to change the bag as this can lead to infection getting into the system.

INTERMITTENT CATHETERISATION

If this applies to you, you will be taught to perform the procedure yourself. Your level of paralysis, particularly your amount of hand function will determine how successful you are in carrying out the technique.

This method of bladder drainage is preferred as it ensures that, if done correctly, your bladder is drained completely and therefore greatly reduces the risk of infection and other long term problems. This method also allows you freedom

from catheters, sheaths and leg bags.

Some of you may be prescribed some medication, which helps to reduce the risk of urine being expelled from the bladder in between catheters. The normal medication used is a drug called *oxybutinin.* If this applies to you, you will receive full instructions of what to do from the doctor who has prescribed it.

DO

- Pass your catheters as regularly as instructed by your doctor or nurse.
- Drink fluids according to your thirst (maximum of 2 litres / day).
- Use a new catheter each time.
- Withdraw the catheter slowly as this will ensure that the urine that has collected at the bottom of the bladder is drained.
- Maintain adequate hygiene.
- AVOID becoming constipated.
- REMEMBER to take any additional medication as prescribed by your doctor.

DON'T

- Forget to pass your catheter regularly as this can cause your bladder to over distend.
- Withdraw your catheter too quickly otherwise some urine may be left behind and will cause infection.
- Ever force the catheter into the bladder if you feel any resistance. There could be a problem with the muscles at the opening to the bladder. Withdraw the catheter and try again after 5-10 mins. If there is still some resistance, do not continue, call for medical advice.

SHEATH DRAINAGE

This is often used by males who have developed a reflex type bladder action but are unaware when their bladder is emptying. It allows you to pass urine through a sheath type device into a bag that is fitted to your leg and held in position by a strap. There are a huge variety of sheaths available.

You will be given advice as to, which is suitable to your individual needs.

Special care should be taken when applying and removing the sheath in order to avoid skin problems.

DO

- Maintain adequate hygiene.
- Change your sheath ***at least*** *every* ***48 hours.***
- Check the skin under the sheath for signs of soreness before you apply another one.
- Ensure that the sheath you are wearing is the correct size for you otherwise this will also lead to leakage.

DON'T

- Put a new sheath onto an area of sore skin. This will only make the soreness worse.
- Forget to empty your leg bag regularly. A heavy bag will cause the sheath to become loose and will cause leakage.

It is essential that you adhere to the basic principals relevant to the form of bladder management which applies to you in order that you prevent a distended bladder which may lead to kidney damage or the occurrence of a urine infection.

WHEN YOU NEED TO CONTACT YOUR DOCTOR

Do so if you notice:

- Any discharge from your penis or vagina. This may be creamy, white, yellowish - brown or bloodstained.
- Any offensive, strong or fishy smell.
- If your urine is smoky, cloudy, thick and/or slimy. These signs often indicate an infection and may mean that you need a course of antibiotics.
- If you have any pain or discomfort from your catheter This may be indicated by a sudden increase in your spasms.
- If you do not pass urine during a period of 12 - 15 hours and you feel abdominal / stomach discomfort or distension.
- If your injury is above chest level, you have not passed urine and you experience a 'banging' headache and become flushed looking in the upper part of your body.

This is a medical condition called *Autonomic dysreflexia* and is a MEDICAL EMERGENCY. You should consult a doctor IMMEDIATELY.

- **If there is continual leakage around your catheter.**
- **If you experience a sudden increase in your spasms.**
- **If you experience any irritation or soreness around the area of your catheter or sheath.**
- **If the urine bypasses your catheter and leaks around it. This can be due to either a blockage of the catheter or the muscle of your bladder contracting and pushing urine out around the catheter.**

- **If you experience any difficulty deflating the balloon when trying to remove your catheter. DO NOT cut the catheter to try to deflate the balloon. Contact your GP, District Nurse or the Spinal Unit.**

If you would like to discuss any issues raised within this leaflet please contact a member of the nursing staff:

Ward Office	(01704) 704346
Spinal Outpatient Department	(01704) 704354

Other sources of information are www.spinalnet.co.uk
Moving forward Manual. Spinal Injuries Association.
Zejdlik, **C.P.** (1992) Management of Spinal Cord Injury. 2nd Edition. Jones & Bartlett, Boston, M. A. Press.

During your time in hospital, it is important to us that you are happy with your care and treatment. Please speak to a member of staff and/or the ward/department Sister/Charge Nurse if you have any questions or concerns.

MATRON

A Matron is also available during the hours of 9am – 5 pm Monday to Friday. During these periods, ward/department staff can contact Matron to arrange to meet with you. Out of hours, a Senior Nurse can be contacted via the ward/department to deal with any concerns you may have.

INFECTION CONTROL REQUEST

Preventing infections is a crucial part of our patients' care. To ensure that our standards remain high our staff have regular infection prevention and control training and their practice is monitored in the workplace. We ask patients and visitors to assist us in preventing infections by cleaning their hands at regular intervals and informing staff of areas within the hospital that appear soiled.

As a patient there may be times that you are unsure whether a staff member has cleaned their hands; if in doubt please ask the staff member and they will be only too happy to put your mind at ease by cleaning their hands so that you can see them.

SPECIAL INSTRUCTIONS FOR AFTER YOU HAVE LEFT THE HOSPITAL PREMISES

ANY CONDITION SPECIFIC DANGER SIGNALS TO LOOK OUT FOR:

If you suffer from Dysreflexia, this is a medical emergency. Consult your own GP immediately.

CONTACT INFORMATION IF YOU ARE WORRIED ABOUT YOUR CONDITION AFTER YOU HAVE LEFT HOSPITAL

Your own GP
Nurse in Charge – (01704) 704345
Spinal Outpatients – (01704) 704354

OTHER USEFUL TELEPHONE NUMBERS/CONTACTS:

NHS 111
Stop Smoking Helpline (Sefton) - 0300 100 1000
Stop Smoking Helpline (West Lancashire) - 0800 328 6297
Spinal Injuries Association (SIA) Advice Line –
0800 980 0501

Please call 01704 704714 if you need this leaflet in an alternative format

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