

## Keeping kidneys and bladder healthy

To keep the kidneys and bladder in good health, it is vital to maintain disciplined self-monitoring procedures.

Always remember:

- Fluid intake – drink enough water to produce 1.5–2 litres of urine daily. Ideally the urine should be a light straw colour.
- Urinary output – keep a record of
  - **Voiding intervals**
  - **Quantity** due to bladder capacity and residual urine
  - **Appearance:** cloudiness  
concentration  
odour  
as a sign of infection
  - **pH** – There are test strips (litmus paper) available to establish the pH of your urine. The urine should test with an acid value somewhere between pH 5–6. To increase the acidity, there are medications you can take or try the natural products available such as rosehip tea, natural blackcurrant juice, cranberry juice, cranberry juice concentrate tablets and Vitamin C tablets. It should be noted that high concentrations of acidic substances can cause indigestion and even ulcers in extreme cases.

If any irregularities occur, consult your doctor and increase your fluid intake – drink tea and plenty of water to stimulate your urinary flow. Many doctors allow consumers who are willing to take control of their bladder management to have a stock of antibiotics (chosen by the doctor based on their infection history). Rather than wait for an appointment to see a doctor or get a specimen of urine analysed, they can then start a course of antibiotics immediately after taking a specimen. It is important to be responsible in the use of antibiotics and always get a specimen analysed to monitor exactly what is going on.

To prevent bladder infection, there is a whole range of medications as well as homeopathic products. Cranberry juice or cranberry capsules/tablets and vitamin C are reported to help prevent bladder infections as they make the urine more acidic and thus less hospitable for bacteria. Consult your continence specialist for details of such treatments.

Sudden headaches could be a sign of increased bladder pressure or even infection. Do not try and self-diagnose – consult your doctor or urology specialist for advice.

## **Bladder training**

Depending on your medical condition you may be suitable for bladder training. Many ladies have to rely on this form of bladder management as they may not wish to be permanently catheterised and find the use of pads distasteful and intermittent catheterisation difficult in the real world. You should discuss the type and scope of bladder training (also known as triggering) with your consultant or urology specialist, after completing a urodynamic examination.

If your doctor advises you carry out bladder training, men are advised to do it whilst wearing a sheath drainage system and women with a suitable absorbant pad. Bladder training helps:

- decrease dependancy on a sheath drainage system
- increase and perfect the automation of the bladder
- reduce distention of the bladder
- reduce the amount of residual urine

## **Intervals for bladder training**

Even people who have partial or no sensation learn to notice changes in their bodies which act as a sign of a full bladder. These signs are important for people who rely on bladder training or intermittent catheterisation to manage their bladders. Such signs are:

- goose pimples on your back, arms, face or forehead
- sweating in specific places such as at the hairline on your forehead
- pins and needles, itching on the back of your arms
- feeling of pressure/tension in the head
- Muscle spasm in legs and abdomen

You can organise the intervals between training by these signs. If no signs occur, you should perform bladder training every 4 hours (except during the night).

## **Risks**

The unbalanced pressure of the bladder (Detrusor-Sphincter-Dys-Synergy) can increase through bladder training and cause long-term damage to the bladder tissues and ultimately damage the kidneys. See also pages 6 & 8.

## Intermittent Catheterisation

You can prevent these risks linked to bladder training by intermittent catheterisation. The catheterisation ensures a pressure and residual-free bladder drainage. If you can't or don't want to perform this procedure yourself or have it done by a carer throughout the day, you should do it at least twice a day (morning and evening). Wheelchair users should take their feet off the footrests and push their pelvis as far forward as possible in order to straighten the urethra as much as possible before passing the catheter.

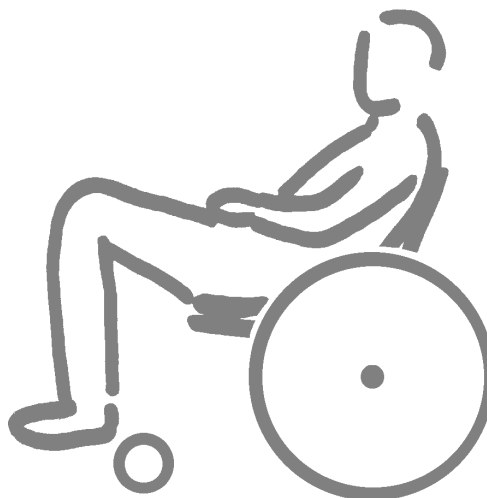
## Performing bladder training

You can use individual stimuli to release the reflexes (the trigger mechanism) by:

- Knocking on the bladder
- Stimulating the skin on the abdomen, the external genitals, or the inside of the thigh
- Rectal manipulation (stretching of the anal sphincter)

Make sure you are in relaxed position!

- When sitting: Push the pelvis as far forward as possible
- When lying: Lie on your side with your knees bent



Those with a limp bladder paralysis should empty the bladder by intermittent catheterisation. Pressing with your hands on the bladder can cause long term damage.

## Useful tips about living with a urine drainage system

### Essential supplies - Small bag

We advise anyone who wears a urinary system to carry a small bag in case of an emergency. This bag should contain:

Urinary sheath Users

- 2 urinary sheaths
- 1 tube of skin adhesive which you have already tried for adhesion quality if you are not using a self-adhesive sheath.
- 1 leg bag – to save space, we advise a discreet thigh bag
- 1 small plastic bag with an elastic band – if the outlet tap starts dripping, you can put the plastic bag around the tap and fasten it with the elastic band.

### If the urinary sheath starts leaking

The urinary sheath may start leaking while you are wearing it, e.g. a small hole appears. After drying the spot, spread some adhesive over it (see reference to the small bag) and glue some of the urinary sheath film together. This should last until you are able to change the urinary sheath in a quieter place.

### Urethral/Suprapubic catheter users

- Syringe to empty balloon of old catheter to enable its removal if it gets blocked
- Spare catheter and accessories required to fit the catheter in case the existing one gets blocked. Most people or their carers can be taught how to fit a catheter. To rely on calling out a healthcare professional should your catheter get blocked in the middle of the night or when on holiday may not be practical
- Catheter valve or spare leg bag should there be a problem with the leg bag you are wearing.

### Techniques for people with limited finger movement to apply a urinary sheath

Many tetraplegics do not have the 'third hand' needed to slide the urinary sheath into the connecting tube. You can solve this problem by using a piece of tubing.

From the inlet tube of a bed bag, cut a piece of approx. 30 cm long (with or without adapter). You can re-use this piece time and time again. Slide this piece of tubing (side of the adapter when used) into the connecting tube of the urinary sheath. To make the tubing slide easier, just wet the tubing or adapter slightly at the point of entry. Hold the end of the tubing with your teeth just above the penis so that you can unroll the urinary sheath with the two balls of your thumbs.

When you have finished with the adhesion procedure and waited for a while (about 5 mins), blow the urinary sheath through the piece of tubing to check that:

- the adhesion is secure
- the urinary sheath does not leak

You can then remove the piece of tubing and slide the connecting tube of the urinary sheath (wet slightly also) into the inlet tube of the leg bag.

The whole procedure takes place while you are sitting with the leg bag ready to be fitted and your trousers undone. To help this procedure, Rolli-Moden trousers have an extra long zip that extends into the gusset.

There is a video (Order no. 99.921) which illustrates this procedure.

## **Adhesion with continual incontinence**

Continual incontinence means that urine drips constantly through the urethra. As a result, the adhesion area is always damp and this always leads to a reduction of the adhesion strength. You should therefore void the bladder by bladder training or catheterisation beforehand. The few remaining urine drops can be stopped temporarily by holding back the penis. Then, there is enough time to dry the skin and go through the adhesion procedure.

The SAUER Comfort self-adhesive sheaths can help in this instance as the adhesion procedure is shorter. These sheaths are put on the penis tip, then unrolled and adhered at the same time.

## **Emptying the urine bag while away from home**

This is the situation: you want to empty while in a car, at the office or on a plane without attracting everybody else's attention.

Before leaving home, slide a latex coupling tube (Order no. 55.38) into the inlet tube of a bed bag. You then put them into a non-transparent plastic bag. You can also use the connecting tube of a urinary sheath as a joint (simply by cutting the connecting tube from a urinary sheath).

To empty the leg bag, slide the coupling tube into the outlet tap of the leg bag and open the tap. As soon as the leg bag is empty, close the outlet tap and remove the coupling tube. To make sure that the bed bag is leakproof, you can either tie or bend the inlet tube and move the (blue) cap of the bed bag adapter over the knot. Later, you can put the bed bag into the plastic bag and dispose of it.

You can also empty the leg bag into the URlIbag (a pocket sized urinal that folds away into a small case). The URlIbag which takes up hardly any room when empty can hold up to 1.1 litres (almost 2 pints). The URlIbag has a cap which closes securely, thus ensuring no leaks when full. You can then empty in an appropriate place at your convenience.

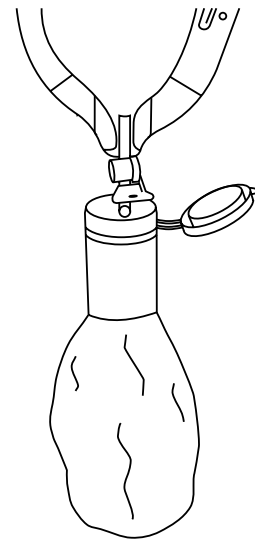
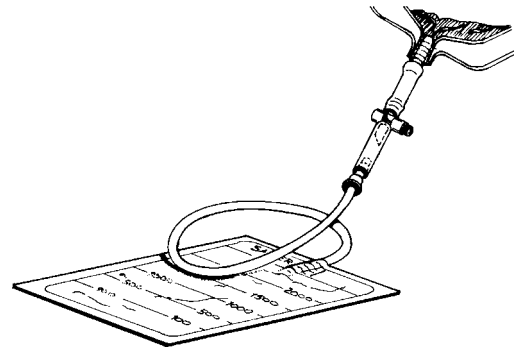
### Taking leg bags off temporarily

From time to time (e.g. in the bath or sauna), you may want to remove the leg bag from the urinary sheath and leave it off for a while. Although leg bags are fitted with a non return valve, it is possible that when lying flat for sometime, a small quantity of urine comes out of the inlet tube.

There are two ways of dealing with this. Often, it is enough to stand the inlet tube up against a wall. The second alternative is to 'close the system' – you add a latex coupling tube to the inlet tube and then join it to the outlet tap. You can order individual coupling tubes (Order no. 55.38) or, even simpler, cut the connecting tube of a urinary sheath.

### The last 100ml – who needs socks?

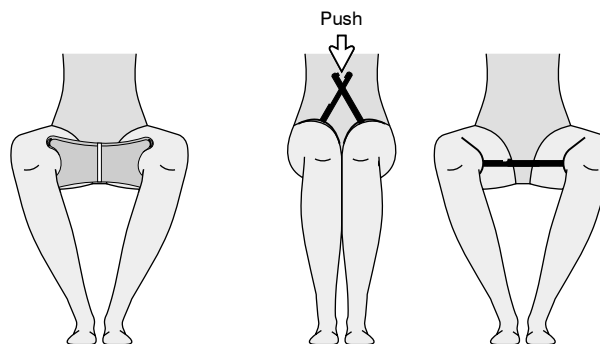
If you choose to wear a leg bag that is drained at the ankle, it does not mean you have to wear socks with long trousers in hot weather. A good tip is to turn the outlet tap assembly upwards and tuck it inside the lower leg bag strap snugly so it is fixed in this position. This effectively gives you a "reserve" tank of about 100mL. So if you forget to keep a watch on how full the bag is getting, you can "untuck" the tap assembly which gives you that little bit of extra capacity and time to find somewhere to empty the bag.



## Aids to catheterisation

Many people have to perform Intermittent Self Catheterisation (ISC). This process can seem very invasive and quite daunting to people new to the procedure. However, rest assured with practice it will become part of your daily routine and need not cause any discomfort or distress. Please seek the advice of your urology specialist nurse or doctor as to the appropriate product for your medical condition and training on the do's and don't of catheterisation. We have developed several devices to make the process of catheterisation easier to perform.

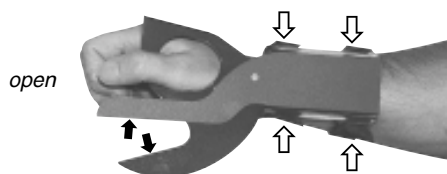
**Leg Dividers:** Divide and hold the legs apart, particularly suitable for ladies that may have a problem catheterising due to uncontrollable leg spasm or find it difficult to find the entrance to the urethra. Two versions are available. Inflatable divider has a mirror and can also be used in the shower to wash between the legs if leg spasm is a problem. Simply inflate to required size/firmness, deflate to store in pocket or handbag for transportation. The metal version also has a torch and is often used by healthcare professionals in clinics to teach ISC and permanently catheterise people with extreme leg spasm.



*Inflatable Leg Divider*

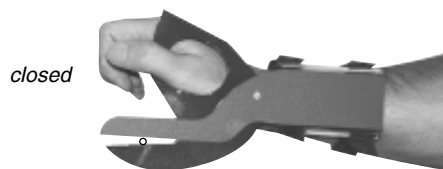
*Metal Leg Divider*

**Cath-Hand:** Was developed by one of our customers with tetraplegia (C5/6). It is strapped to the wrist/forearm and enables anyone with poor grip and finger dexterity to perform ISC by a gently flexing of the wrist, can be used with hydrophilic catheters that when wet are very slippery to handle. Left & right hand versions are available. The Cath-Hand can also be used to pick up other objects about the house.



*open*

- ↑ The "jaws" can be roughened.
- ↑ Exact adaptation using a hair-dryer.



*closed*

*The hand-lifting muscle is tensed, the catheter is kept in a firm hold.*