

# INSTRUCTING MALE PATIENTS IN THE TECHNIQUE OF ISC

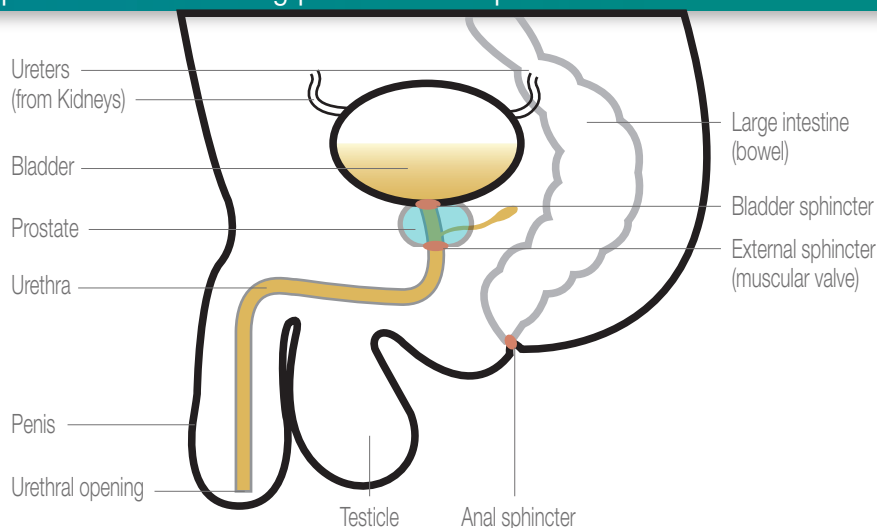
Intermittent self-catheterisation (ISC), or clinically clean intermittent catheterisation (CCIC), are techniques developed to treat patients with bladder dysfunction that has resulted in urinary retention. ISC is recognised as a technique that can reduce the incidence of infection when compared with indwelling catheters. It is regarded as the 'gold standard' in the treatment of chronic residual urine and this article examines the best practice for educating patients in the procedure.

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Intermittent self-catheterisation (ISC) is a method for periodically draining a poorly emptying bladder (Figure 1). The patient or carer passes a catheter into the patient's bladder to drain residual urine, which helps to reduce infection and prevent the bladder from becoming over-distended (Barton, 2000).

The aim of ISC is to prevent the build-up of residual urine in the bladder, which can lead to reflux and infection. High residual urine rates are a significant risk factor for urinary tract infection (Chua et al, 1996).

Catheters used in ISC do not require a retention balloon and are comprised of a plastic tube with a tip at one end and funnel at the other. A number of manufacturers produce single-use ISC catheters with a hydrophilic coating, which aids insertion. These have been demonstrated to be safe and comfortable for patients and can reduce urethral trauma (Medical Devices Agency, 2000).



## 1. The anatomy of the bladder.

Catheter 'kits' are also available and these have an attached urine drainage bag incorporated into a sterile pack. These are particularly useful for patients who cannot easily access toilet facilities.

## PATIENT EDUCATION

When teaching and supporting a patient to perform ISC, the following areas need to be covered:

- ▶▶ The patient's individual bladder dysfunction
- ▶▶ Anatomy, especially the identification of the urethral orifice
- ▶▶ The correct ISC technique, including appropriate positioning to aid comfort
- ▶▶ Hygiene needs, including hand washing and cleansing of the genitalia

- ▶▶ The use of catheters, including, storage, cleaning (where required with reusable catheters) and disposal
- ▶▶ Possible problems and solutions
- ▶▶ Sexual relationships
- ▶▶ Avoidance of constipation and dietary advice
- ▶▶ Travelling with catheters
- ▶▶ How to obtain supplies
- ▶▶ Follow-up arrangements.

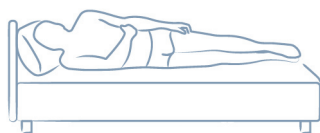
## THE TECHNIQUE

Patients should be taught to ensure that they have all the equipment within easy reach before attempting to perform ISC. If they forget something and have to search for it, they will need to begin the procedure again as touching other surfaces or objects could introduce infection.

## Position

It is important for patients to find a comfortable and convenient position in order to perform catheterisation. This needs to take into account their lifestyle and any disabilities they may have and can include (Figure 2):

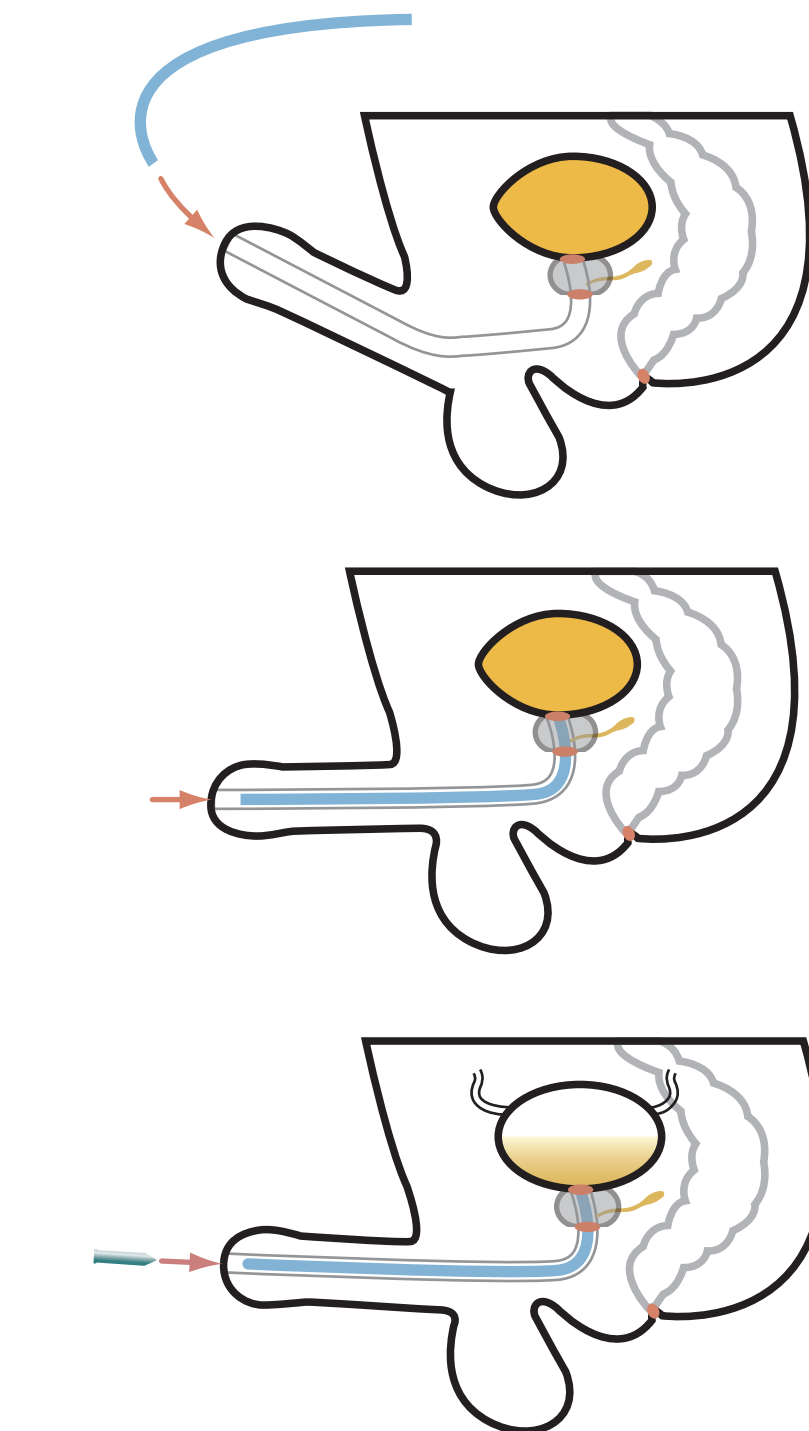
- ▶▶ Standing over the toilet
- ▶▶ Sitting on the toilet, chair or edge of the bed
- ▶▶ Sitting in a wheelchair
- ▶▶ Lying on their side in bed (especially helpful for those who have poor mobility and may need to perform the procedure at night and for those who are unwell).



2. Patients must be comfortable before catheterisation is performed.

It may be more appropriate for patients to use a receptacle when performing ISC away from their home, as it can be embarrassing and often unhygienic to have to catheterise in a public toilet. In addition, wheelchair users may encounter problems in finding accessible toilets.

Patients should be instructed to wash their hands thoroughly, including nails, and not to touch anything (i.e. toilet door handles) other than the items they need until the procedure is over. This guards against infection.



3. The patient should introduce the catheter into the urethral opening with the penis facing upwards.

4. When the catheter has been successfully inserted into the urethral opening, the penis should be moved to a horizontal position in order that the catheter can be fully inserted.

5. The patient should then relax and smoothly continue pushing the catheter along the urethra and into the bladder.

## Preparing the catheter

The patient should then activate the catheter coating. If using a

hydrophilic catheter, the patient should activate the coating according to the manufacturer's

instructions. If the patient is using a reusable catheter, a lubricating gel will be required.

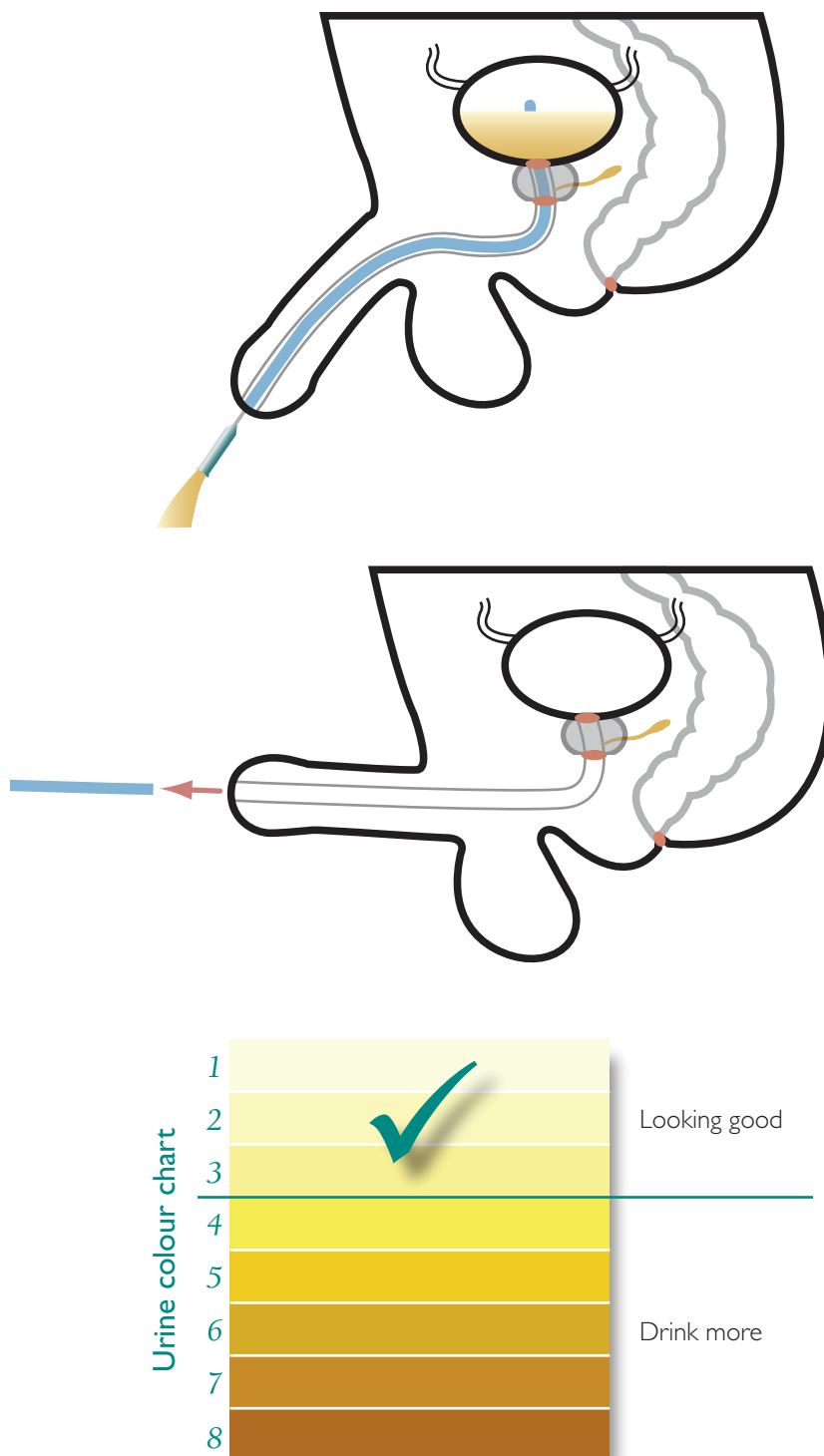
If possible, the patient should try and urinate before attempting the procedure. The head of the penis should also be washed with water.

The catheter should be introduced into the urethral opening with the penis facing upwards (Figure 3). When the catheter has been successfully inserted into the urethral opening, the penis should be moved to a horizontal position in order that the catheter can be fully inserted (Figure 4).

The patient should relax and slowly and smoothly continue pushing the catheter along the urethra towards the bladder (Figure 5). Healthcare workers should inform patients that they may feel some resistance but not to be forceful. It is best to wait a short while and try again (5–10 minutes should be allowed and a new catheter used). Some patients find that a ‘small cough’ can help when encountering resistance.

When the catheter reaches the bladder, the urine will begin to drain (Figure 6). When the flow of urine stops, the patient should move the catheter back and forth for a few millimetres to ensure the bladder is completely empty. If urine starts to flow again, the patient should keep the catheter still until the flow stops, before slowly withdrawing it.

Some patients find catheter withdrawal is more comfortable when they lift the penis into a horizontal position during the removal process – this smooths out the bends in the urethra (Figure 7).



6. The patient should allow the urine to flow until the bladder is completely empty.

7. The penis can be held horizontally to aid catheter withdrawal.

8. Healthcare workers should advise patients to drink enough fluids to ensure the urine is a ‘light straw’ colour and matches the colours 1–3 on the urine colour chart shown above.

The catheter should not be flushed down the toilet, but rather disposed of in the normal

household waste. The patient should then wash the hands with soap and water or a wipe.

### ONGOING MANAGEMENT

Healthcare workers should advise patients to drink enough to ensure the urine is a light 'straw' colour and matches the colours numbered 1–3 on the 'Urine colour chart' (Figure 8). If their urine matches the colours 4–8, patients may be dehydrated and will need to drink more.

Patients should be advised not to wait until the last minute before attempting ISC – even if they have a good idea of when their bladder is full, performing ISC takes some time to organise. Waiting until they are uncomfortable can cause unwanted leaks and is also potentially harmful to the kidneys as it can cause infections.

If the patient is taking medication to prevent leaking between catheterisations, it is vital that they empty the bladder in plenty of time to prevent kidney damage. Too much urine in the bladder can create high pressures that force urine back up through the ureters to the kidneys, again risking infection.

### WHAT TO WATCH OUT FOR?

#### Signs of infection

Healthcare workers and patients should look out for the following signs of infection:

- ▶▶ Leaking between catheterisations
- ▶▶ A desire to empty the bladder more frequently than usual
- ▶▶ High temperature, sweats and shivers (flu-like symptoms)
- ▶▶ Urine that is stronger smelling than usual or cloudy
- ▶▶ Pain or burning when passing urine

- ▶▶ Lower back ache.
- ▶▶ More than a few spots of blood.

If the patient has one or more of these symptoms, a specialist nurse or doctor should be contacted as soon as possible, as infections can cause serious illness.

Patients may need a short course of antibiotics to clear up the infection and they should be informed of the possible side-effects, such as changes in the colour of urine. Patients should also be advised to complete the course of tablets, even after the symptoms have cleared up.

### DETERMINING THE FREQUENCY OF CATHETERISATION

Authors have indicated catheterisation frequencies ranging from 4–7 times per day (Wyndaele and Maes, 1990; Chua et al, 1996). If the patient does not void at all, bladder volumes should not exceed 500mls between catheterisations. The residual urine should not be less than 100mls as catheterisation would be required too frequently (Getliffe and Dolman, 2007) (visit the downloads section of the Manfred Sauer website for a Bladder Record Chart that will help patients determine the required frequency of catheterisation – [www.manfredsauer.co.uk](http://www.manfredsauer.co.uk)).

### CONCLUSION

The most important part of teaching anyone to perform ISC is the time factor. It can take a

number of appointments before a patient is confident to try the technique and even longer for them to become independent. Healthcare workers need to ensure that they provide as much information as possible and to allow time for patients to ask questions. **CE**

### ACKNOWLEDGEMENTS

*These guidelines have been adapted with the permission of Manfred Sauer Ltd. The images contained in the article have also been adapted to meet the style of Continence Essentials. Printed copies of the full tutorial can be obtained through the Manfred Sauer Ltd helpline (0870 1904 100) or downloaded from their website at: ([www.manfredsauer.co.uk](http://www.manfredsauer.co.uk)).*

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