Introduction

Your child’s doctor has advised you that your child needs to have clean intermittent catheterisation. This leaflet aims to support the discussion you had with the doctor / nurse and to enable you to make an informed decision.

How does the urinary system work?

To understand how a catheter works it is helpful to know what the urinary system is. The urinary system consists of the kidneys, the ureters, the bladder and the urethra. The kidneys filter the blood to remove waste products. This process produces urine (pee). The urine then passes down the ureters to the bladder. During urination (peeing) urine passes from the bladder, through the urethra to outside of the body.

What is a urinary catheter?

A urinary catheter is a hollow, flexible tube inserted into the bladder to drain urine.

There are three methods of catheterisation:

- **Intermittent catheter** – a catheter is temporarily inserted into the bladder and removed once the bladder is empty. This can be repeated at regular intervals.

- **Indwelling urethral catheter** – a catheter that can stay in the bladder for days or weeks. It is held in place by a water-filled balloon. These catheters are sometimes referred to as Foley catheters and are usually attached to a drainage bag. There is a further information leaflet to discuss this type of catheter.

- **Suprapubic catheter** - a catheter that is surgically inserted into the bladder through the abdomen (tummy) and that can stay in for weeks or months. These catheters are usually used when bladder drainage is needed on a long-term basis. There is a further information leaflet to discuss this type of catheter.

Why does my child need to have clean intermittent catheterisation (CIC)?

Your child’s doctor or nurse will explain the reasons why your child needs to have CIC. These are some of the possible reasons:

- To allow urine to drain if your child has a blockage or narrowing in their urethra.

- To allow your child to empty their bladder if there is nerve damage which is affecting their ability to urinate. Children with spinal problems, such as Spina Bifida or a spinal cord injury use CIC.

- Children who are wet (incontinent) may use CIC if other treatment methods have not helped. CIC may help them stay dry for longer periods.

- To administer medication into your child’s bladder.
What are the benefits of clean intermittent catheterisation?
By regularly emptying the bladder CIC can help prevent growth of bacteria in the bladder and protect your child’s bladder and kidneys from infection and damage. CIC allows the bladder to empty and this may help prevent reflux (backflow) of urine to the kidneys that can cause damage. It can also help a child to improve their continence.

What are the risks of my child having clean intermittent catheterisation?

- **Urinary tract infection (UTI)**
  All children who are catheterised will have a small amount of bacteria in their urine. Antibiotic treatment is only prescribed if your child becomes unwell with symptoms of urinary tract infection.

  Symptoms of urinary tract infection include:
  - offensive smelling urine,
  - cloudy urine,
  - lethargy (tiredness),
  - nausea (feeling sick),
  - loss of appetite,
  - high temperature.

  If your child has any of these symptoms it is important to seek medical advice as soon as possible. A sample of urine must be taken before antibiotic treatment is started. Encouraging your child to drink lots of fluids can help prevent urinary tract infection by reducing the amount of bacteria in the urine. Good hygiene, including thorough hand washing before catheterising, is also important.

- **Bleeding**
  If it is just a couple of specks of blood, it could mean the lining of the urethra has been scratched during catheterisation. This will settle. If the bleeding is heavy or does not stop you should seek medical advice.

- **Stricture**
  Stricture is a rare complication of CIC. Stricture is a narrowing of the urethra due to scar tissue caused by repeated use of a catheter. The catheters used for CIC are designed to reduce this risk.

What if I decide I do not want my child to have clean intermittent catheterisation?

For children whose bladder, sphincter muscle and/or nerve messages from the bladder to the brain do not work properly, urinary problems may occur. The bladder may over fill with urine and become distended. This can push urine back up to the kidneys causing them to become damaged. When the bladder does not empty properly urinary tract infections may occur and in some cases this may cause damage to the kidneys. Poor bladder emptying may also cause wetting (urinary incontinence).

You should discuss any concerns you have with your child’s doctor or nurse. There may be suitable alternatives, such as a suprapubic catheter. However, this procedure requires a general anaesthetic. There are risks associated with this procedure, which your child’s doctor will explain. The catheter will also need to be replaced every three to six months and this may require further general anaesthetics.

It is important to remember that if the bladder isn’t emptied urine can build up and lead to pressure in the kidneys. The pressure can cause permanent damage to the kidneys which can be life threatening.
External catheters, also called sheaths, are a possible alternative for older boys who are wet but do not have urinary retention (poor bladder emptying). Sheaths look like condoms and cover the head of the penis. A tube leads from the sheath into a drainage bag. These catheters have a lower risk of infection but need to be changed daily. If this is a possible alternative your child’s doctor or nurse will discuss this with you.

**How is a clean intermittent catheter inserted?**

The catheter is inserted through the urethra into the bladder to drain the urine. Once the bladder is empty the tube is then removed. This usually takes less than five minutes. This procedure is done using a clean, non-sterile technique. The catheters are single use and disposable.

There are lots of different types and brands of catheters. Some catheters are pre-lubricated (coated in lubricating gel or water) and others are self-lubricated and become slippery when soaked in water. You and your child will be offered a choice of catheters. Your child’s urology nurse will help you make a decision as to which one is most appropriate for your child.

Catheters come in different diameters (width) and lengths. Catheter diameter is measured in Charriere (CH). You will see this measurement on the catheter packaging. The sizes start at 6CH (for babies) and go up to size 18CH. The size of the catheter will increase as your child’s grows, although most children will not use a catheter larger than 12CH. Catheters are available in three lengths paediatric, male and female. Your child’s urology nurse will advise you on the most appropriate length of catheter for your child.

**How often will my child need to have clean intermittent catheterisation?**

This will vary according to how much urine your child can pass normally and how much urine they leave in their bladder. Your child’s doctor or urology nurse will discuss the frequency of catheterisation with you. Normally clean intermittent catheterisation is performed every four hours (after the bladder empties it usually takes three to four hours to refill) from first thing in the morning until bedtime. Some children may need catheterisation overnight but this isn’t usually necessary. Medications may be prescribed to help the bladder hold more urine e.g. Oxybutynin. These medications can affect bladder emptying and you may need to increase the frequency of your child’s catheters.

**Using clean intermittent catheterisation at home**

Older children (from approximately five years upwards) can learn to do CIC. Younger children are usually catheterised by their parents or carer. If you feel that your child is ready and able to learn CIC, please discuss this with your child’s urology nurse who can organise training. It is advisable that at least two carers at home know how to catheterise your child. School or nursery staff can also be taught how to catheterise your child if necessary. Please discuss this with your child’s nurse.

Before your child is discharged you will be supplied with enough catheters to last for one week. Your child’s urology nurse will arrange home delivery of further catheters. The delivery company will contact your GP for a prescription.

**You should contact the delivery company for further supplies approximately one week before you run out.** Contact details will be supplied with the first delivery. Some GP’s may prefer that you obtain further supplies from your local pharmacy.

If you are going on holiday you will need a medical letter to explain why you are carrying catheters. You should keep some of your child’s catheters in your hand luggage.
Equipment needed includes:

- appropriate size catheters (your child’s doctor or nurse will advise you on what size to use),
- disposable wipes,
- container for collecting urine if your child is not sitting on a toilet,
- clean towel,
- mirror (if your child is doing the catheterisation).

Instructions of how to practice clean intermittent catheterisation

- Collect the necessary equipment:
  - catheters,
  - disposable non-fragranced wipes,
  - container for collecting urine (if your child is not sitting on a toilet),
  - continence products e.g. nappy or pad if required
- Place the equipment on a clean area within easy reach of where catheterisation will be performed. Catheterisation should take place in a clean, private area with access to toilet and sink.
- Wash your hands thoroughly with liquid soap and water and then dry on a clean towel or disposable paper towel.
- Discuss and explain the procedure with your child.
- Position and undress your child to allow catheterisation. This can be sitting on the toilet, lying on their back or sitting in their wheelchair. Use a clean towel if necessary.
- Clean your child’s genital area. This is the area between their legs.
  - In girls the outside area should be cleaned first. The labia should then be parted and they should be cleaned from the front to back. This prevents bacteria (germs) being transferred from the back passage.
  - In boys the head of the penis should be cleaned used a circular motion. If your son is not circumcised and if you are able to, gently pull back the foreskin and clean. If your son’s foreskin is too tight to pull back please ask your child’s urology nurse for advice.
- Wash your hands again.
- Open the catheter packet. Avoid touching the part of the catheter that will be inserted into your child’s bladder.
- If using a catheter that requires lubricant to be added then wait 30 seconds for the lubricant to work.
- Find the urethral opening and gently insert the catheter into the bladder until urine starts to drain.

If your child is a girl and catheterising themselves a mirror can be used. If the catheter is accidently inserted into the vagina (no urine will drain) leave this catheter in place and use a new catheter to insert into the urethra. Leaving the catheter in the vagina will help you find the urethra. Never remove a catheter from the vagina and insert into urethra as this could cause a urinary tract infection. Once urine is draining you can remove the catheter from the vagina.

In boys the penis should be held upright so the urethra is straight. Just before the catheter enters the bladder you may feel some resistance. Continue to advance the catheter with gentle but firm pressure. Sometimes having your child take a deep breath can help. Continue to insert the catheter until urine drains and then insert for another 5cm.
• Drain the urine into the toilet or clean container. If you are catheterising a baby the urine can drain into their nappy.

• When the urine stops draining slowly remove the catheter. If more urine flows then leave the catheter in place until it stops. Continue this until no more urine comes from catheter. Depending on how much urine is in the bladder it may take several minutes to empty.

• Wipe the genitalia.

• Dispose of the catheter in a nappy sack.

• Wash your hands

• Redress and position your child comfortably.

You should check the amount, colour and smell of your child’s urine. If your child’s urine is dark in colour they may need to drink more. If your child’s urine is offensive smelling they may have a urinary tract infection and you should contact your child’s doctor or nurse for advice.

**Flushing the catheter**

If your child’s doctor or nurse thinks that your child’s catheter may be prone to blockage by mucous you will be shown how to flush your child’s catheter before discharge. You should only flush regularly if you have been advised to do so by your child’s doctor or urology nurse.

You will need:
- 60ml syringe with catheter tip,
- alcohol pads,
- saline (sterile salt water),
- gallipot,

• Collect the equipment and put it on a surface cleaned with an alcohol pad.

• Wash your hands with liquid soap and dry on kitchen towel.

• Remove the gallipot from the package.

• Open the saline packet and empty it into the gallipot.

• Remove the syringe from the packet. Put the packet to one side.

• Use the syringe to draw up the saline. Your child’s urology nurse will advise you how much to use. It is usually between 10 and 20mls.

• Place the syringe back in the packet to keep it sterile (free from germs). Do not touch the tip of the syringe or let it touch anything else.

• Catheterise your child as explained previously.

• When all the urine has drained leave the catheter in the bladder.

• Connect the syringe to the end of the catheter.

• Gently push on the plunger of the syringe. This will insert the saline into the bladder.

• Continue until all the fluid is inserted.

• Remove the syringe and catheter.

• Wipe the genitalia.

• Dispose of the catheter and syringe in a nappy sack.

• Wash your hands.

• Redress and position your child comfortably.
Important points to remember about clean intermittent catheterisation

- Always wash your hands with soap and water and dry them well before and after clean intermittent catheterisation.

- Clean intermittent catheterisation should always be performed in a private, clean area and the equipment should be placed on a clean surface.

- Please ask your child’s nurse how you can obtain a RADAR key that will allow your child to have access to disabled public toilets.

- It takes practice for you to learn how to catheterise your child.

- If you are going on holiday you will need a medical letter to explain why you are carrying catheters. You should keep some of your child’s catheters in your hand luggage.

- It is important to observe for constipation. Constipation can prevent the catheter draining well. It can also increase the risk of urinary tract infection. Encouraging your child to eat a healthy balanced diet that includes fruit, vegetables and fibre can help prevent constipation. Drinking good amounts of oral fluids can also help. Sometimes laxatives may be prescribed to help prevent constipation. If you are concerned your child may have constipation please contact their doctor or nurse for advice.

Further appointment information

Your child will continue to have regular follow up with their Urology Consultant. If there are any problems in the meantime you may contact the Urology Nurses or your local continence nurse.

For further information

Please contact the Urology Nurses on: 0151 252 5852.
Working hours: Monday to Friday 9am to 5pm.

Out of hours please contact Ward 3A via switch board 0151 228 4811

This leaflet only gives general information. You must always discuss the individual treatment of your child with the appropriate member of staff. Do not rely on this leaflet alone for information about your child’s treatment. This information can be made available in other languages and formats if requested.

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