UZ LEUVEN

Teaching intermittent catheterisation for boys

patient information

Introduction

The care providers at the hospital have already provided you with a great deal of information about the catheterisation that you, as parents, will be performing on your child. This information brochure offers you some additional support.

This booklet contains more information about what exactly intermittent catheterisation is and how it can become part of your daily routine. It also explains the different steps of the catheterisation technique, where to obtain the necessary material, and key points to be aware of.

We will practise the technique step by step during a day admission or hospital stay.

Other caregivers besides the parents (e.g. grandparents or other family members, or care providers of the day nursery or school) are also welcome to attend this practical information session.

At the back of this brochure, you can also record catheter volumes and the weight of the nappies (diapers). It is helpful if you complete this and bring it to your next consultation.

If you still have questions, please don't hesitate to get in touch using the contact details provided at the back of the brochure.

The paediatric urology care team

WHAT EXACTLY IS CI(S)C OR INTERMITTENT CATHETERISATION?

Catheterisation is the emptying of the bladder using a catheter In medical terms it is referred to as CI(S)C: *clean intermittent (self) catheterisation*. That means that the bladder will be hygienically emptied at suitable intervals.

Why is catheterisation necessary?

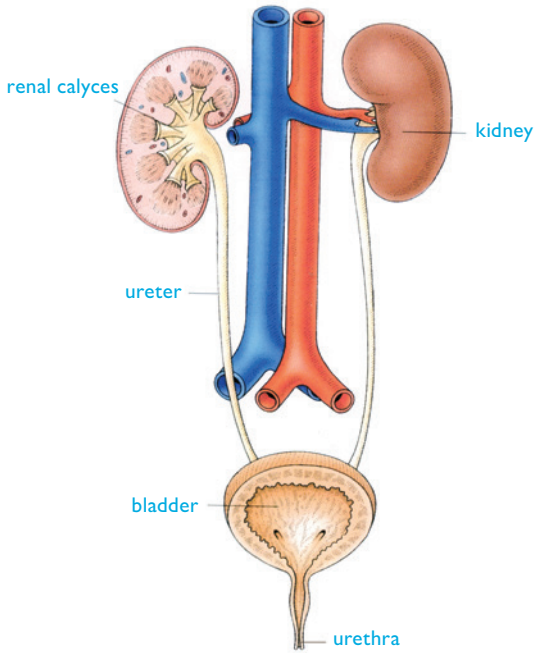
Intermittent catheterisation can be applied at all ages.
The main reasons are:

- Incomplete bladder emptying, which can cause infections
- Excessive pressure in the bladder, which can cause bladder and kidney damage
- Uncontrolled urine leakage

Sometimes, catheterisation is temporary. However, some children and adults may require catheterisation for the rest of their lives.

The doctor will discuss with you why catheterisation is necessary for your child.

NORMAL FUNCTIONING OF THE URINARY TRACT

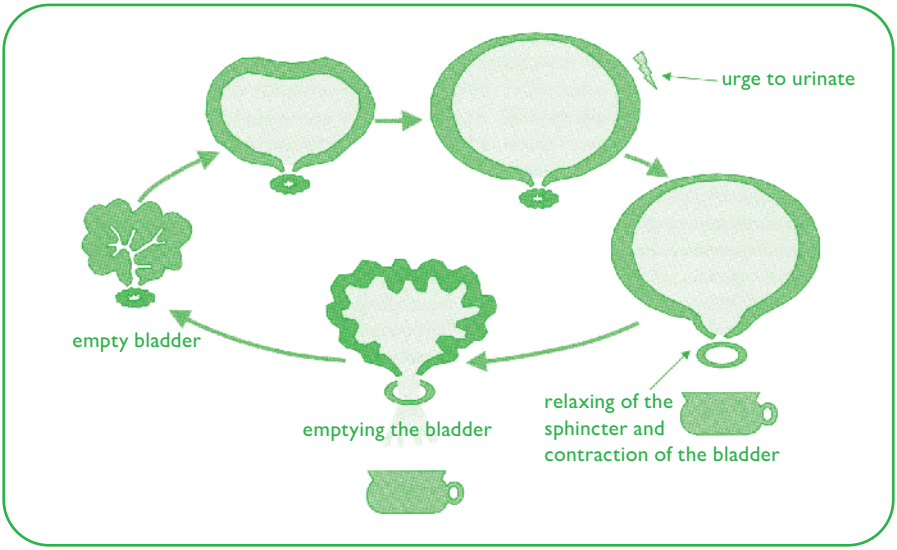


Urine is produced by the kidneys and travels via the ureters to the bladder where it is stored.

The size, shape, and capacity of the bladder vary from person to person. Children's bladders obviously grow bigger as they get older.

An empty bladder can be compared to a flat, deflated balloon.
As it gradually fills with urine, it resembles a round balloon.
When the bladder is sufficiently filled, you feel the urge to urinate.

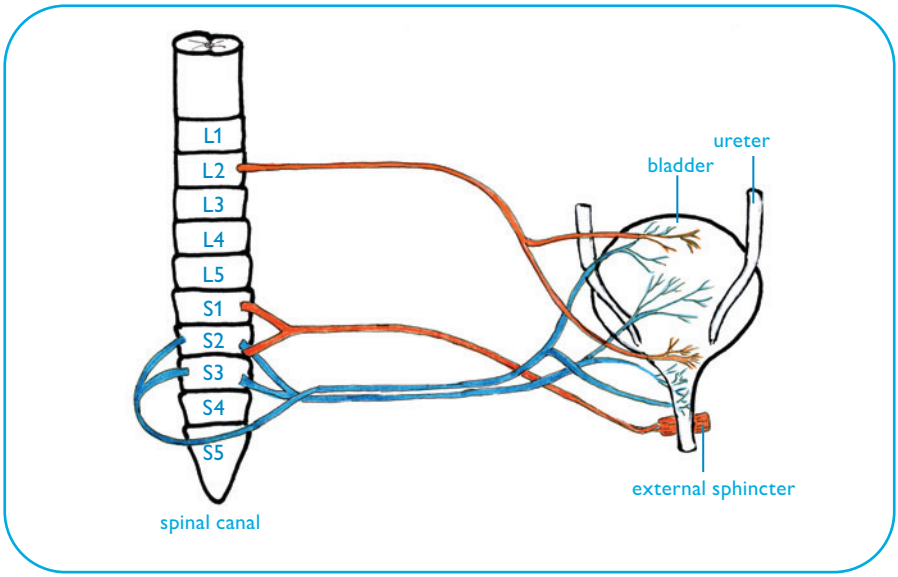
The brain signals the sphincter to relax while simultaneously causing the bladder muscle to contract, thus allowing the bladder to empty.



WHERE CAN THINGS GO WRONG?

Neurogenic bladder

Sometimes a congenital disorder (e.g. spina bifida) or an acquired disorder (e.g. trauma) may lead to a neurogenic bladder. In these cases, the signal from the brain to the sphincter and bladder muscle is disrupted, resulting in an inability to sense when the bladder is full. A miscommunication may cause the bladder to contract at an inappropriate time and the sphincter to relax when it should not, or vice versa.



Non-neurogenic neurogenic bladder

Occasionally, even without a neurogenic disorder the sphincter may not relax properly when necessary, causing urine to flow back from the bladder to the kidneys (vesico-urethral reflux). This situation is referred to as a non-neurogenic neurogenic bladder.

Urethra valves

In some cases, boys are born with urethra valves: valves in the urethra that increase bladder pressure because fully emptying the bladder is not evident. This condition may also lead to reflux (when urine flows back from the bladder to the kidneys). Urethral valves can sometimes be detected before birth via ultrasound (hydronephrosis).

DOES CATHETERISATION HURT?

Most children and adults with a neurogenic bladder have damaged nerve pathways and consequently have sensory disturbances, which means they do not feel catheterisations. Others may feel the insertion and advancement of the catheter but do not experience it as painful. It is normal for your child to need time to get used to the new situation

There may occasionally be some blood visible (mucus, light pink colour) in the catheter after catheterisation. Usually this is caused by friction against the urethral mucous lining. In most cases this is harmless but if it persists, you should contact your GP or the nurse consultant.

YOU CAN LEARN HOW TO INSERT A CATHETER

The technique (CIC) is not a sterile procedure but must be performed hygienically. It is therefore crucial to follow certain guidelines:

- ✔ Wash your hands with water and liquid soap before each catheterisation. Dry your hands with a clean towel used exclusively for this purpose (not a towel used by other family members).
- ✔ Wash your child's intimate area thoroughly once a day. In between, you can use wet wipes.
- ✔ Use a new catheter for each catheterisation. Each catheter is intended for single use.
- ✔ Before inserting the catheter, make sure the tip of the catheter has not touched anything.

To fully empty the bladder and minimise trauma to the urinary tract, the largest catheter that fits in the urethra should be used. The catheter size varies with your child's age and will be recommended by the doctor or nurse.

Age	CH (thickness of the catheter)
0-1	8
1-8	10
8-12	12
12-8	14

Step by step

STEP 1: hygiene

Wash your child's intimate area thoroughly once a day. Afterwards, you only need to clean with a wet wipe if there is stool loss.

Wash your hands thoroughly with water and liquid soap.

STEP 2: prepare the material

Have the catheter and collection material (e.g. a new nappy or a container) ready and within reach.

Use a new catheter for each catheterisation: each catheter is intended for single use. Before inserting the catheter, make sure the tip of the catheter has not touched anything.

STEP 3: insert the catheter

Open the packaging of the catheter. Hold the penis with your non-dominant hand.

If possible, gently retract the foreskin slightly.

Gently insert the catheter with your dominant hand. Do not use force it if you encounter resistance. The resistance may be caused by the sphincter. In such cases, withdraw the catheter a centimetre and try again gently.

STEP 4: empty the bladder

Once the urine starts flowing, insert the catheter another centimetre to ensure all openings or drainage holes of the catheter are in the bladder.

STEP 5: remove the catheter

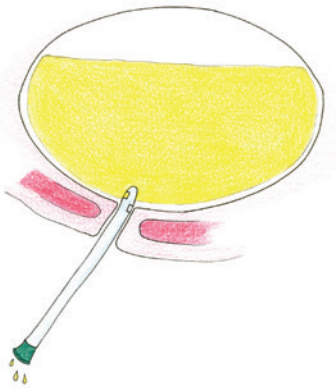
When the urine stops flowing, gradually remove the catheter, centimetre by centimetre, until no more urine comes out. The catheter can be completely removed now.

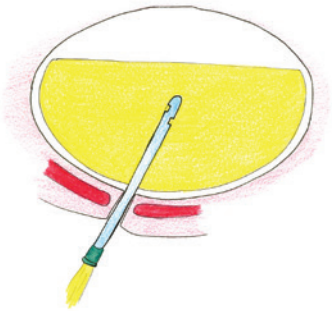
STEP 6: Dispose of waste

Put the used catheter with the general waste.

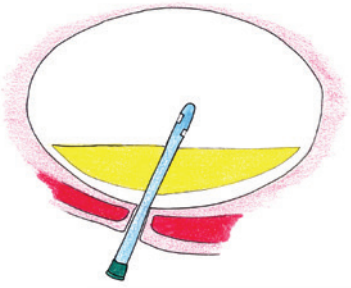
STEP 7: Wash hands again

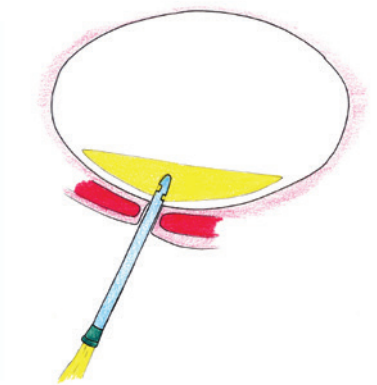
Insert the catheter





Remove the catheter





Practical tips

- ✔ Provide distraction during catheterisation. For babies or young children, this can be achieved with something that glows or toys that make a sound.
- ✔ Each catheter is intended for single use.
- ✔ For a baby or bedridden child, place the changing mat with the head end slightly higher than the feet to ensure the bladder is complete emptied.
- ✔ Stretch the penis slightly upward to facilitate catheter insertion.
- ✔ During urine flow, direct the catheter downward for optimal emptying.

How often should you catheterise?

Once you have mastered the technique, the bladder usually needs to be emptied five times a day to reduce high pressure of the bladder. Ideally, you should catheterise every three to four hours. This will be explained by the nurse during the day admission or by the doctor during the consultation.

With a baby, it is easier to catheterise before giving a bottle. You can soothe the baby with the bottle afterwards. If your baby falls asleep while drinking, you don't need to wake it up for the catheterisation.

- Empty the bladder for the first time upon waking and the last time right before bedtime.
- The other catheterisation times should be spread throughout the day, and may vary on week days and weekends.
- At night, the kidneys automatically produce less urine, which means night-time catheterisation is not necessary. However, it is important to limit fluid intake in the hours before bedtime. After a party or the like, it may be necessary to set an alarm and catheterise during the night.

Example of a schedule

Wake up	Morning	Midday	Afternoon	Before bed
7 a.m.	10 a.m.	1 p.m.	4 p.m.	7 p.m.

Medication

Your child will also be started on an anticholinergic: a medicine that works on the smooth muscle tissue of the bladder. The doctor will adjust the medication regularly based on your child's weight.

This medication aims to:

- Reduce overactivity of the bladder.
- Maintain a safe bladder pressure, reducing the risk of vesicoureteral reflux.
- Increase bladder capacity.

WHEN SHOULD YOUR CONTACT A DOCTOR OR THE CARE TEAM?

- If your child suddenly experiences pain during catheterisation.
- If catheterisation becomes increasingly difficult.
- If blood is visible in the urine for several consecutive days.
- If the urine has a bad smell or appears cloudy
- If your child develops an unexplained fever. In case of fever, have a urine sample tested as soon as possible as well.

PURCHASE AND REIMBURSEMENT OF MATERIAL

Children under 18 are covered under the third-party payer system and are entitled to reimbursement for up to eight catheters every 24 hours.

Upon discharge from hospital, you will receive a certificate (Annex II) for reimbursement. Send the certificate in a sealed envelope to the consulting doctor or put it in the letterbox of your health insurance.

It is important to arrange the catheter supply as soon as possible. The hospital will provide enough catheters for the first few days at home. You can purchase the material in two ways:

- Order the material from your pharmacy.
  You may need to pay for the catheters in advance. Reimbursement will follow once approval is received from the consulting doctor of your health insurance fund. Request reimbursement on receipt of this approval. All the documents must be complete first.

- Order from a home delivery company.
  The nurse will contact the company and pass on the required information. The company gets in touch with you to reach further agreements and to arrange delivery of the material. It also takes care of the paperwork for you at no extra cost. You may hand over the certificate (Annex II) directly to the company instead of sending it to your health insurance fund. When you are running low on catheters, the company will automatically contact you for the next delivery.

→ It takes around two to three weeks to receive the approval of the health insurance fund.

→ This approval will be sent to you by post and/or digitally. As soon as you receive it, forward the document (or a copy) to your pharmacy or the home delivery company. It is important that you keep the authorisation and bring it with you every time you visit the pharmacy.

EVALUATION OF THE TECHNIQUE

About a week after learning the catheterisation technique, the responsible nurse will contact you again to see how things are going at home. Do not hesitate to ask questions. If you wish, an additional consultation can be scheduled.

We also recommend keeping track of the catheterised volumes and nappy content in a catheterisation diary.

Example of a catheterisation diary

Date: . . . . / . . . . / . . . .

Time of catheterisation	Nappy weight before catheterisation (= total weight - weight of the new nappy)	Catheterised volume (in ml) or nappy weight (in grammes)	Fluid intake	Comments
7 a.m.	50 g	100 g		
7.30 a.m.			150 ml milk	

Date: . . . . / . . . . / . . . .

Time of catheterisation	Nappy weight before catheterisation (= total weight - weight of the new nappy)	Catheterised volume (in ml) or nappy weight (in grammes)	Fluid intake	Comments

Date: . . . . / . . . . / . . . .

Time of catheterisation	Nappy weight before catheterisation (= total weight - weight of the new nappy)	Catheterised volume (in ml) or nappy weight (in grammes)	Fluid intake	Comments

CONTACT DETAILS

You can always phone or email:

Paediatric urology Nurse consultant

- Jolien Delestinne
- 016 34 60 46
- zorgteam.kinderurologie@uzleuven.be

Specialist nurse spina bifida

- Imana Truyers
- 016 34 01 05
- imana.truyers@uzleuven.be

Design and Production
this text was composed by the paediatrics department in conjunction with the Communication department.
Thank you to Greet Mommen for providing the illustrations for the catheterisation technique.

This brochure is also available at www.uzleuven.be/en/brochure/700009.

Comments or suggestions pertaining to this brochure can be submitted via communicatie@uzleuven.be.

Published by
UZ Leuven
Herestraat 49
3000 Leuven
tel. 016 33 22 11
www.uzleuven.be

700009_v042025