

Your child's surgery to move the opening of the water pipe to the top of the penis (2-stage hypospadias repair)

This leaflet is about your child's surgery to move the opening of their water pipe to the top of the penis. It is called hypospadias repair. In this case, we plan to do the surgery in 2 separate stages. The leaflet explains what you should do before your child's surgery, on the day of the surgery and when you return home.

Your child's condition and procedure

What is 2-stage hypospadias repair?

A 2-stage hypospadias repair involves 2 different procedures to:

- straighten the penis
- move the opening of the water pipe (urethra) from an incorrect position onto the head (glans) of the penis

At the same time, we usually remove the fold of skin (foreskin) that covers the head of the penis. This is called circumcision.

Your child has the surgery under a general anaesthetic. This is a medicine that makes them sleep and stops them feeling any pain during the procedures.

Why should my child have a 2-stage hypospadias repair?

Some boys are born with a condition called hypospadias. This can affect the opening of the water pipe through which urine leaves the body (urethra) and the appearance of the foreskin. It can cause a curve to the penis.

If your child has hypospadias, the opening of the water pipe is not in its usual place but lower on the penis. This may affect the direction of the urine stream and cause spraying when your child pees. Rarely, the water pipe may be narrowed.

Your child's penis may have a hooded appearance. This happens when the foreskin is widely open on the front side of the penis. It makes the foreskin and penis look different to the more usual appearance.

The curve to the penis can sometimes cause problems later in life, such as difficult or painful sex.

We need to do a 2-stage hypospadias repair if:

- the condition is more extreme
- we cannot give the penis a more usual appearance with only a single procedure

In the first procedure, we straighten the penis. We also remove the foreskin and use part of it to extend the water pipe during the next procedure. When we move a piece of skin from one area of the body to another, it is called a skin graft.

We do the second procedure a few months later. In the second-stage procedure, we use the skin graft to extend the water pipe onto the head of the penis.

After a 2-stage hypospadias repair, your child's penis will:

- be straight
- have an opening for the water pipe on or near the tip
- have no foreskin (be circumcised)

Before your child's surgery

What needs to happen before my child's surgery?

We need to see your child at a pre-admission clinic. This clinic may take place face to face or online. We make sure that your child is ready for an anaesthetic and surgery.

After the pre-admission clinic, our admissions team contacts you by letter, text message or phone. We offer you dates for your child's procedures. We also explain when your child should stop eating and drinking (fast) before their procedures.

Do I need to get pain medicine ready for my child?

Please make sure that you have a week's supply of paracetamol (a painkiller) and ibuprofen (an anti-inflammatory medicine) at home before the procedure. We do not routinely give these medicines to take home for your child after day surgery.

You can buy paracetamol and ibuprofen from a pharmacy, supermarket or shop. Paracetamol for children may also be called Calpol[®]. Ibuprofen for children may also be called Calprofen[®] or Nurofen[®]. You need the type of medicine that you would give your child if they were unwell with a cold or ear ache.

If your child cannot take paracetamol or ibuprofen for any reason, please speak to their healthcare team about other options.

On the day of the surgery

When you arrive at the children's day surgery unit

We give you a time to arrive at the Evelina London children's day surgery unit for each procedure. It is important that you arrive at the correct time and have followed the fasting instructions for your child. If you arrive late or have not followed the fasting instructions, we may not be able to do the procedure.

You and your child meet the surgical and anaesthetic teams on the admissions ward before each procedure. We confirm that you have given your permission (consent) for the procedure. You can ask us any questions that you may have.

During the surgery

We give your child a general anaesthetic. This is a medicine that makes your child sleep and stops them feeling any pain during the procedure. You can stay with your child until they are asleep. Please see our separate leaflet called "Your child's general anaesthetic" for details.

The surgery involves 2 separate procedures.

- **Stage 1**

When your child is asleep, the surgeon straightens their penis and removes the foreskin. The penis then has a circumcised appearance. Part of the foreskin is used as a skin graft. The surgeon attaches the piece of skin underneath the penis. They then use this extra skin to make a longer water pipe (urethra) during the second-stage procedure.

At the end of the first-stage procedure, we leave a small tube to drain your child's urine. This tube is called a catheter. It is usually held in place with a stitch. We put a dressing on the penis. The catheter drains urine into your child's nappies or a bag if they are potty trained.

We remove the catheter and dressing about a week later. To prevent the fragile skin graft from getting damaged, we give your child a brief general anaesthetic when doing this.

After we have removed the catheter and dressing, the penis looks different from the usual appearance. This may be partly due to swelling and bruising. However, when these side effects settle, the penis continues to look unusual until after the second-stage procedure.

- **Stage 2**

We do the second procedure a few months later if the skin graft has been successful. Again, your child has a general anaesthetic.

When your child is asleep, the surgeon uses the skin that has been moved onto the penis (skin graft) to lengthen the water pipe. This pipe can then extend to the tip of the penis. Finally, the surgeon closes the skin.

At the end of the second-stage procedure, your child has a catheter and dressing similar to after the first procedure. We remove the catheter and dressing about a week later. Your child does not need a general anaesthetic for their removal this time.

After we have removed the catheter and dressing, the penis may look swollen and bruised. When these side effects settle, you can see the final appearance of the penis.

Are there any other treatment options to this surgery?

Hypospadias can be left without surgery if there is no narrowing of the water pipe (urethra). Your child's penis will continue to look different from a penis without hypospadias and this appearance will not change.

We can delay a hypospadias repair until your child can give a view on if they want to have the procedure. The emotional (psychological) effect on children growing up with hypospadias is not clearly known. However, if the condition and curve to the penis are extreme, it may not be possible to have sex later in life without surgery to correct the curve.

Sometimes, we can correct the opening of the water pipe and curve of the penis with only one procedure. This is called a single-stage hypospadias repair. The surgeon tells you if this is possible for your child. In some cases, the surgeon only knows if a single-stage or 2-stage hypospadias repair is suitable when doing the operation.

If we can do a single-stage hypospadias repair, there may be the option to keep the foreskin. The surgeon explains if your child can have a foreskin reconstruction. This is when we repair the large opening of the foreskin to give it a more usual appearance.

For more details, please see our separate leaflet called "Your child's procedure to move the opening of the water pipe to the top of the penis (single-stage hypospadias repair)".

Are there any risks to my child's procedure?

Every procedure has some risks of complications. To reduce these risks, we make sure that your child is well at the time of each procedure. We talk to you about the risks in the clinic and before the procedures when we confirm that we have your consent.

Sometimes, we need to take a child back to the operating theatre after a hypospadias repair. We can then correct any problems with the dressing or catheter.

With a 2-stage hypospadias repair, there is a small risk of a wound infection or bleeding from the wound. After the first-stage procedure, there is also a small risk that the skin graft will not heal well or connect with the surrounding blood supply. If this happens, your child may need another procedure to have a new skin graft.

When we have done both procedures, there can sometimes be a problem with the repaired water pipe (urethra).

- There might be a narrowing of the water pipe. This might make it difficult for your child to pee or even leak urine by accident (urinary incontinence).
- There might be a leak from the water pipe. This is called a fistula. If a fistula forms, urine will come out of the extra hole when your child pees.

These problems often need to be corrected with more surgery.

There is a chance that your child might need another procedure to improve the appearance of the penis after a 2-stage hypospadias repair.

It is possible that some curve might remain in the penis. This might only be noticeable when your child grows. Sometimes, your child might need more surgery in future to correct any remaining curve in the penis.

After your child's surgery

How will my child look and feel after their surgery?

Your child may feel drowsy after their surgery and sleep for a while. They may be restless (agitated) and upset for up to an hour after waking up from each procedure. Some children may have pain and feel or be sick (vomit), but this is not common.

During the surgery, we may give your child painkillers, fluids, anti-sickness medicines and a local anaesthetic. The local anaesthetic is medicine that makes the area around the wound numb.

Will my child be in pain after their surgery?

We give your child a long-lasting local anaesthetic medicine during their surgery. It gives them pain relief for up to 6 hours after they wake up. The anaesthetic doctor explains this before the surgery. Your child wakes up with very little pain.

When your child is awake, we may give them paracetamol, ibuprofen or both medicines regularly. You can continue to give your child these medicines as needed when they are at home. The nurses can guide you when the next amount (dose) of pain medicine is due.

The catheter to drain urine can cause sudden tightening of the muscles (spasms) in the bladder. These spasms may be painful. We give your child medicine, such as oxybutynin, to prevent bladder spasms.

When can my child eat and drink or feed after their surgery?

Your child should be able to eat and drink or feed as usual within 1 to 2 hours of each procedure.

Do we see the surgeon after my child's surgery?

Yes, the surgeon comes to check your child after their procedure. They update you about the surgery and answer any questions that you may have.

When can my child go home?

Your child can go home on the same day as each procedure when they:

- feel comfortable
- can manage (tolerate) their usual food and drink
- are not feeling sick (nausea) or being sick (vomiting)
- are behaving as they usually do
- have peed after the procedure

Please supervise your child carefully on the journey home. According to the sudden infant death syndrome (SIDS) guidelines, it is best to avoid long car journeys for babies under 1 year of age. If you travel home by car, it is important that:

- you stop for frequent breaks to feed your baby and change their position
- an adult sits with the baby in the back of the car

After you go home

How do I care for my child after the surgery?

The surgeon or a member of their team gives you specific instructions about caring for your child after each procedure. They explain the arrangements for their follow-up care.

Sometimes, medicine to prevent bladder spasms can make your child constipated. This is when they find it hard to poo. We may recommend that your child takes a laxative, such as lactulose. This medicine treats constipation by making the poo softer and easier to pass.

The nurses show you how to look after your child's tube that drains their urine (catheter) and dressing before you go home. Please do not put your child in the bath with the dressing. It is important that you try to keep the dressing clean. If the dressing gets dirty, you can clean it with baby wipes or something similar. However, it is common for the dressing not to be clean when we remove this 1 week after the procedure.

Before you and your child go home, we tell you when to return to have their catheter and dressing removed. We usually do this 1 week later. Please make a note of where and when you need to come for this appointment before leaving hospital after the procedure.

When we have removed the catheter and dressing, we check that your child can pee without problems. You need to wait until your child has peed twice before going home.

After the first-stage procedure, you need to take care of your child's skin graft. We give you antibiotic cream to rub into the skin graft 2 times each day. When you have used all of this cream, please continue to rub paraffin ointment into the skin graft 2 times every day. This helps to keep the skin graft healthy.

How can I manage my child's pain after their surgery?

We recommend giving your child paracetamol and ibuprofen if they do not have any problems taking these medicines. You can give your child the medicines regularly for a few days and then as needed to control pain.

Please remember to buy the pain medicines before the day of your child's surgery. It is also important to make sure that your child drinks plenty of fluids.

It is safe to give the 2 medicines at the same time, ideally with food. This is easier to plan and the medicines work in different ways. You can give your child:

- 1 recommended amount (dose) of paracetamol every 4 to 6 hours and no more than 4 doses in 24 hours
- 1 dose of ibuprofen every 6 to 8 hours and no more than 3 doses in 24 hours

You may find the following chart helpful to keep track of your child's medicines.

Home medicine chart for parents

Medicine	Time to give	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
Paracetamol								
Ibuprofen								

Do I need to look for any symptoms after my child's surgery?

After your child's surgery, contact a GP or go to your nearest emergency department (A&E) if you feel that they are unwell or notice any of the following issues:

- **Catheter stops draining urine**
 If urine stops coming out of the catheter or drains alongside the catheter, this could mean that the catheter is blocked or not working.
- **Bleeding**
 There are often some blood stains on the dressing. Your child may have a little blood in their urine. This comes from where the catheter rubs against the bladder. These small amounts of bleeding are not usually a problem. However, it is important to get medical help if:

 - the blood stains on the dressing get bigger
 - blood starts coming out through or around the dressing
 - there is increasing swelling or bruising of the pouch just below the penis that contains the testicles (the scrotum)
- **Infection**
 If your child has a high temperature (fever), this could be a sign of an infection.

Do you see my child again after their surgery?

If your child needs a follow-up appointment, we will tell you before you go home. We then get in touch nearer the time and tell you the exact date and time of the appointment.

Contact us

Before the procedure

For **advice about your child's procedure**, call the urology medical secretary, **phone** 020 7188 4610 or 020 7188 4628, **email** evelinaurologydoctors@gstt.nhs.uk

If you **cannot keep your appointment**, contact our admissions team, **phone** 020 7188 9098, **email** gst-tr.paediatricadmissions@nhs.net

If your child is **unwell in the 2 weeks before the procedure**, contact our pre-assessment team, **phone** 020 7188 7188 extension 58209 (Monday to Friday, 9am to 5pm)

If your child is **unwell any time after 5pm on the evening before the procedure**, contact the bed managers, **phone** 020 7188 7188, choose the option for the bleep desk, bleep 0821 when connected and wait for the response

After the procedure

For **medical advice**, **email** evelinaurologydoctors@gstt.nhs.uk

For **advice from the clinical nurse specialists**, **email** evelinabladdernurses@gstt.nhs.uk

For questions about **outpatient appointments**, **phone** 020 7188 4000, **email** paediatricappointmentsurology@gstt.nhs.uk

If you are concerned that your child is **seriously unwell** at any time, go to your nearest A&E or **phone** 999

For more information on conditions, procedures, treatments and services offered at our hospitals, please visit **web** www.evelinalondon.nhs.uk/leaflets

Evelina London Medicines Helpline

If you have any questions or concerns about your child's medicines, please speak to the staff caring for them or contact our helpline, **phone** 020 7188 3003, Monday to Friday, 10am to 5pm **email** letstalkmedicines@gstt.nhs.uk

Your comments and concerns

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS), **phone** 020 7188 8801 **email** pals@gstt.nhs.uk. To make a complaint, contact the patient resolution team **phone** 020 7188 3514 **email** complaints2@gstt.nhs.uk



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