

Pyeloplasty surgery

This leaflet explains more about pyeloplasty for pelvi-ureteric junction (PUJ) obstruction, including the benefits, risks and any alternatives, and what you can expect when your child comes to hospital. If you have any further questions or concerns, please speak to a doctor or nurse caring for your child.

What is PUJ obstruction?

Urine is made by the kidneys. The urine moves into a funnel called the pelvis. From there it moves into a tube called the ureter on the way down to the bladder. In PUJ obstruction there is a problem with the flow of urine from the pelvis into the ureter. If the problem is not treated, it may cause damage to the kidneys. In some children PUJ obstruction can cause pain or a urinary tract infection.

What is pyeloplasty?

Pyeloplasty is an operation to improve the flow of urine from the pelvis into the ureter. The part of the ureter that meets the pelvis is removed and then the ureter is re-connected to the pelvis over a temporary drainage tube which helps healing.

Why does my child need to have a pyeloplasty?

The main benefit of the operation is to prevent further damage to the kidney. The operation will also stop pain or urinary tract infections that are due to PUJ obstruction.

What are the risks?

Although the operation is usually done without any problems, there are still some risks.

There are small risks of urine infection and/or bleeding, but it is unusual for a blood transfusion to be needed.

The most frequent problems happen with the temporary drainage tube – it may stop draining or may leak. These usually happen when your child is still in hospital. They are usually dealt with very easily, but sometimes children will need to go back to the operating theatre to have a new drainage tube put in.

The pyeloplasty operation is usually very successful at improving urine flow from the kidney. However about one in 20 children may need further surgery because urine flow has not been improved.

Are there any alternatives?

Sometimes a wait-and-see approach may be used instead of surgery. This will require very careful monitoring with regular scans to make sure that problems do not happen as a result of an untreated PUJ obstruction.

It is possible to perform a pyeloplasty as a minimally invasive 'keyhole' technique (laparoscopic operation). This is not suitable for all children. Your doctor will discuss whether your child is suitable for this surgery.

If a kidney is very badly damaged it may be better to remove it instead of trying to repair it. You can discuss this possibility with your doctor.

How can we prepare for pyeloplasty?

There is no specific preparation for pyeloplasty, however all children that need to have an operation involving a general anaesthetic, will be asked to attend a pre-assessment clinic.

At this appointment, we will make sure your child is fit for their general anaesthetic. You will also be given information about what will happen on the day of your child's operation or planned test before their hospital stay. You and your child will get the chance to ask any questions you may have.

Please make sure you bring a list of any medication that your child may be taking, including any over-the-counter or alternative medicines

On the day of surgery you will need to arrive at the ward on time, so that you can meet the surgeon and anaesthetist.

General anaesthetic

This is medicine that is used to make sure a person is asleep and does not feel any pain during an operation. Specially trained doctors, called anaesthetists, care for all patients have an anaesthetic. All children having an operation will be cared for by specialised paediatric (children's) anaesthetists who have been specifically trained to give anaesthetics to children.

Consent – asking for your consent

We want to involve you in decisions about your child's care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This states that you agree to have the treatment and you understand what it involves.

If you would like more information about our consent process, please speak to a member of staff caring for you.

What happens during pyeloplasty surgery?

Your child will need a general anaesthetic before they can have their operation. We'll take your child to the anaesthetic room next to the operating theatre to do this. You can go with them and wait until they have fallen asleep. A nurse will come with you and then take you back to the ward once your child is sleeping.

The operation is performed through an opening approximately 6cms long, on the upper part of the abdomen (tummy). At the end of the operation there will be a small tube coming out of their side; this is a temporary drainage tube that will drain urine from the kidney. The opening will be closed with dissolvable stitches.

The operation will take approximately three hours.

Once your child begins to wake up, you may be able to come and sit with them in the recovery room while the anaesthetic wears off.

When your child is fully awake and comfortable, they will be able to go back to the ward.

Will there be any pain?

We aim to keep your child's pain well controlled. We will give your child medicine to help make them as comfortable as possible.

What happens after pyeloplasty?

Usually your child will stay in hospital for two days. Urine will drain from the drainage tube. After two days the drainage tube is closed, usually with a knot. Your child is then allowed to go home with the drainage tube still in position. Your nurse will explain how to look after the drainage tube when you're at home.

After a week your child will return to the ward to have the drainage tube removed. This is very easy and is done with your child awake. A single stitch is cut and the tube is pulled out, this causes little discomfort.

What do I need to do after I go home?

With the drainage tube in it will not be possible to bathe, shower or swim. Once the tube is removed your child can have a bath.

Your child will not come to any harm from moving, walking or running.

Your child's urine may contain some blood which will make the urine pink or red. Encouraging your child to drink lots will help flush the blood away.

Your child should stay at home until the tube is removed. If they are comfortable there should be no problem returning to nursery or school after the tube is removed.

You should seek medical attention (from your GP or your nearest Emergency Department (A&E)) for your child if they have any of the following signs of infection:

- needing to pass urine more frequently
- increase in pain
- cloudy or smelly urine
- high temperature (over 38°C)
- redness around the wound
- discharge from the wound.

Will there be a follow-up appointment?

Your child will be seen again, a few months after their operation, in clinic with another scan. You will be sent an appointment for this.

Contact us

If you have any questions or concerns following your child's surgery, please contact Beach Ward, **t:** 020 7188 8844 at any time. (For a reply in two working days, email the medical team, **e:** evelinaurologydoctors@gstt.nhs.uk)

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit 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.

t: 020 7188 3003, Monday to Friday, 10am to 5pm **e:** letstalkmedicines@gstt.nhs.uk

Your comments and concerns

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.

t: 020 7188 8801 (PALS) **e:** pals@gstt.nhs.uk
t: 020 7188 3514 (complaints) **e:** complaints2@gstt.nhs.uk

Language and Accessible Support Services

If you need an interpreter or information about your care in a different language or format, please get in touch.

t: 020 7188 8815 **e:** languagesupport@gstt.nhs.uk

NHS 111

Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.

t: 111

NHS Choices

Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.

w: www.nhs.uk

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Members of Guy's and St Thomas' NHS Foundation Trust contribute to the organisation on a voluntary basis. We count on them for feedback, local knowledge and support. Membership is free and it is up to you how much you get involved. To find out more, and to become a member:

t: 0800 731 0319 **e:** members@gstt.nhs.uk **w:** www.guysandstthomas.nhs.uk/membership



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