

Procedure information

Pyeloplasty

What is a pyeloplasty?

A pyeloplasty is a surgical procedure to correct a blockage or narrowing at the pelvic-ureteric junction (the PUJ).

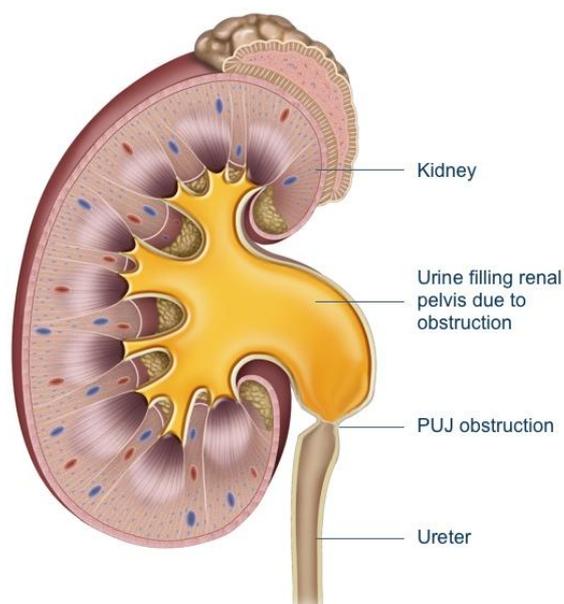
The PUJ is where the renal pelvis (the funnel-like part of the kidney that collects urine) meets the ureter (the tube that drains urine to the bladder).

Blockage of the PUJ is known as a PUJ obstruction.

What causes PUJ obstruction?

PUJ obstruction usually occurs due to abnormal development of the the PUJ. It is present from birth but may not become apparent until later in life.

Less commonly, PUJ obstruction can occur due to scar tissue from trauma, infection, kidney stones, or previous surgery.



What are the symptoms of PUJ obstruction?

PUJ obstruction blocks the flow of urine from the kidney to the bladder via the ureter. This can result in:

- Flank or side pain.
- Pain after drinking fluids.
- Infections in the kidney.
- Stones in the kidney.
- Damage to the function of the kidney.

Why is a pyeloplasty required?

A pyeloplasty is intended to restore the normal flow of urine from the renal pelvis to the bladder via the ureter.

It is performed to treat the symptoms of PUJ obstruction, and to prevent damage to the function of the kidney.

What does a pyeloplasty involve?

Pyeloplasty is performed in hospital under general anaesthesia (completely asleep). The operation is usually performed via multiple key-hole incisions in your abdomen using laparoscopic or robotic surgical equipment. Occasionally it is performed open via a single longer incision in your flank.

During the operation, we find and cut away the blocked section of your PUJ and then reconnect your ureter back to your renal pelvis with dissolvable stitches.

At the end of the operation, we insert a drain (a plastic tube coming out of your abdomen) and a catheter (a tube draining urine from your bladder). These will usually be removed on the ward before you are discharged from hospital.

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We also insert a long, thin, hollow drainage tube inside your ureter, known as a ureteric stent. The ureteric stent will need to be removed 6 to 8 weeks after the pyeloplasty via cystoscopy (looking into the bladder with a camera).

The incisions are closed with dissolvable stitches or staples.

How successful is a pyeloplasty?

Pyeloplasty has over a 90% success rate in restoring normal kidney drainage and relieving symptoms of PUJ obstruction.

What is the recovery after a pyeloplasty?

You will usually be in hospital for 2 to 4 days after the operation.

You will have mild pain for several weeks after the operation. You will be given pain relief medication in hospital and at home to help control the pain.

Depending on your job, you can usually return to work 2 to 4 weeks after the operation.

You will usually be able to return to driving approximately 2 weeks after the operation.

You won't be able to do vigorous exercise or heavy lifting for 6 to 8 weeks after the operation.

What are the risks of a pyeloplasty?

The risks of this procedure include (but are not limited to):

Common risks (1/2 to 1/10):

- Bloating and abdominal discomfort for several days after the operation.
- The bowels being slow to work after the operation.
- Mild pain or discomfort related to the ureteric stent while it is in place.

Occasional risks (1/10 to 1/50):

- Wound infection, urine infection, or chest infection requiring antibiotics.
- Conversion from a keyhole operation to an open operation via a larger incision. This will prolong your recovery.
- Problems with wound healing, or a wound hernia.
- Scarring inside the abdomen (adhesions) which can cause blockage of the bowel.
- Failure of the pyeloplasty, with the PUJ obstruction persisting or recurring, requiring further treatment.

Rare risks (1/50 to 1/250):

- Bleeding during or after the operation requiring a blood transfusion or another operation/procedure to correct.
- Leakage of urine from the repair requiring another operation/procedure to correct.
- Severe infection inside the abdomen or in the blood stream (sepsis), requiring antibiotics and/or another operation/procedure to correct.

Very rare risks (<1/250):

- Damage to the kidney requiring its removal.

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- Damage to another organ such as the bowel, liver, spleen, pancreas or lung, requiring another operation/procedure to correct.
- Skin, muscle, or nerve damage from positioning during the operation.

Other uncommon or very uncommon risks of surgery and anaesthesia include:

- Blood clots in the legs (Deep vein thrombosis (DVT)) or lungs (Pulmonary embolus).
- Chest infection (Pneumonia).
- Heart attack.
- Stroke.
- A serious allergic reaction (Anaphylaxis).
- Death.

What are the alternative treatment options?

The alternatives to pyeloplasty for the management of a PUJ obstruction include:

- Conservative management (surveillance) – appropriate if the obstruction is mild, not causing symptoms, and kidney function is preserved.
- Endopyelotomy or balloon dilation – a minimally invasive procedure in which the narrowed PUJ is cut or dilated from within using an endoscope. This is less invasive than pyeloplasty but has a lower success rate.
- Long-term ureteric stenting to maintain drainage of the kidney.
- Open pyeloplasty – if a keyhole approach is not suitable.

This is general information only. Please consult your doctor for more information and treatment options.

For appointments and enquiries please contact 07 3830 3300.