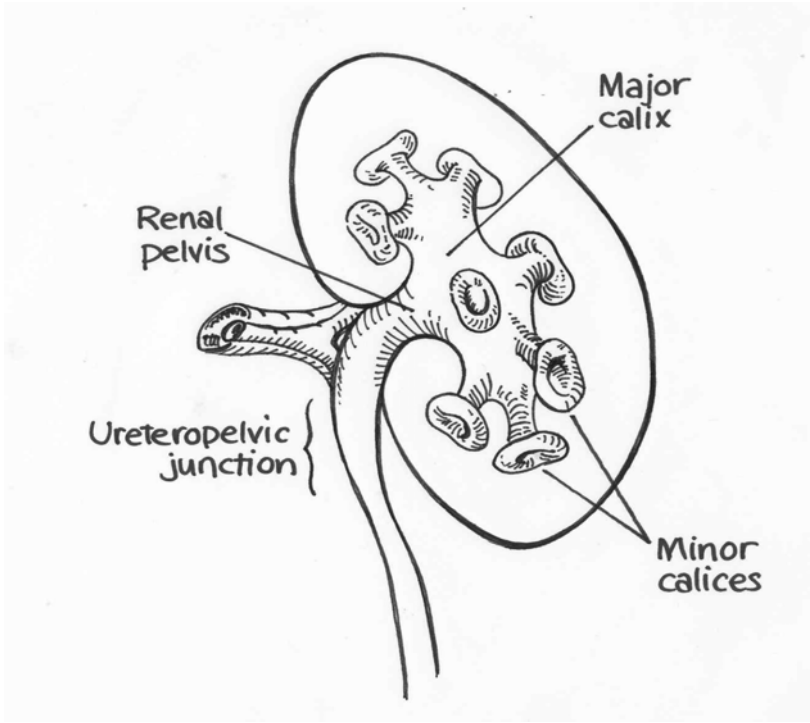
PYELOPLASTY PATIENT INFORMATION

The information contained in this booklet is intended to assist you in understanding your proposed surgery; some of the content may or may not apply to you. Feel free to discuss any issues and questions you may have about your surgery with the medical and nursing staff looking after you. If required, your nurse will arrange for an interpreter to assist with explaining the contents of the booklet. The interpreter can also be present for doctors' consultations. Please bring this book with you to hospital as it is a useful guide.

What is a Pyeloplasty?

A Pyeloplasty is the removal or repair of a stricture (narrowing) from the upper part of the ureter (a hollow muscular tube approximately 25cm long that transports urine from the kidney to the bladder). Failure to repair this abnormality usually results in substantial damage to the kidney tissue that can progress to kidney failure if left untreated. Of people requiring a Pyeloplasty, the majority are born with an abnormally formed ureteropelvic junction (the join between the ureter and kidney); the remainder have suffered damage to the ureteropelvic junction because of TB, kidney stones or scarring from infections.



Potential Complications

All urological surgical procedures carry a small risk of post-operative bleeding and wound, chest and urinary tract infection. You will be monitored for these risks and treated promptly if they occur.

- **Excessive bleeding**
  Your wound, drain(s) and vital signs (blood pressure and pulse) will be monitored for signs of excessive bleeding.

- **Infection**
  Your chest, wound and urine will be monitored for early signs of infection and intervention will be put in place if it occurs. To reduce the risk of infection antibiotics are given directly into your bloodstream during your operation and continued post-operatively if necessary. You can also assist with the prevention of infection by maintaining good hygiene and doing your deep breathing exercises. Early mobilisation also helps.

- **Potential urine leak**
  During your operation a small tube (stent) is inserted in the kidney and extends down the full length of the ureter. While the body heals, the stent acts as a splint and also allows urine to flow freely to the bladder reducing the risk of urine leakage from the internal joins. If a urine leak occurs despite this, the stent may be left in place for longer. Generally the body will reabsorb any urine leakage over time, but if the amount of urine is large it may need to be drained by another tube inserted under x-ray guidance. This is an unusual occurrence.

- **Incisional hernia**
  As a wound heals, scar tissue forms creating a bond between the two sides of the incision. The scar tissue is strong but

can still occasionally tear or give way. This leads to a bulge developing along the scar (incisional hernia) usually within one to five years after surgery. A hernia may not cause any discomfort but if it is troublesome it may require repair.

- **Recurrent obstruction**
  Occasionally, obstructive symptoms may persist and/or reoccur after surgery and further treatment may be required. Your doctor will discuss this with you.

Length of Stay

The usual length of stay is four to five days. However, if you need to stay longer for a medical reason, your doctor will discuss this with you.

Before Surgery

Informed consent

After consultation with the doctor you will be asked to sign a form to give written consent for the surgeon to perform the operation and for an anaesthetic to be administered. Relevant sections of the form must also be completed if you agree to a blood transfusion and/or if your particular surgery involves the removal of a body part and you wish to have this returned. Our expectation is that you feel fully informed about all aspects of your surgery before giving written consent. The following health professionals are available to help you with this process.

Nurses

A nurse will explain what to expect before and after surgery. Please ask questions and express your concerns; your family or people close to you are welcome to be involved. When you are discharged from hospital your nurse will arrange for you to receive ongoing support, advice and practical help, if needed.

Tests

Blood samples

Samples of your blood will go the laboratory to check your general health before surgery.

Blood transfusions

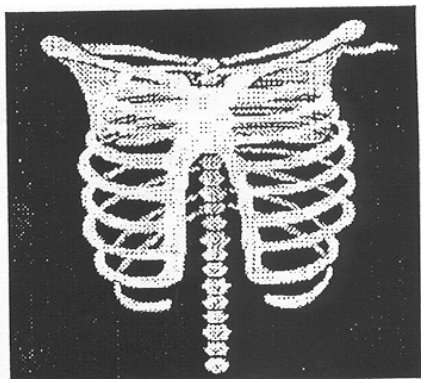
A sample of your blood will go to the blood bank to identify your blood type so this can be matched with donated blood. This donated blood is then ready for transfusion during or after surgery if required. **We will need your written consent before a transfusion is able to take place.**

Midstream urine

A sample of your urine is sent to the laboratory to check that there is no bacteria.

Chest x-ray

If requested by the doctor or anaesthetist, a chest x-ray will be performed to check on the health of your lungs.



ECG

An electrocardiogram (ECG) of your heart may be required depending on your age and any diagnosed heart conditions.

Other measures

Nil by mouth

As your stomach should be empty before an anaesthetic, you must not eat anything or drink milk products six hours prior to surgery. You may, however, be able to drink clear fluids up to two hours before surgery - the Pre-Admission Clinic or ward nurse will clarify this with you.

Bowels

If required for your surgery, you will have been given an enema to use at home. This empties the lower bowel and helps to prevent constipation after your surgery.

Breathing exercises

Breathing exercises will be taught to you by your nurse or physiotherapist pre-operatively. They are important as they help to keep your lungs clear of fluid and prevent chest infection. They should be carried out regularly after surgery by supporting your abdomen with a soft pillow, taking four to five deep, slow breaths, then one deep cough.

Leg exercises

Leg exercises help keep muscle tone and promote the return of blood in your leg veins to your heart. These include pedalling the feet, bending the knees and pressing the knees down into the mattress.

Do not cross your legs - this squashes your veins causing obstruction to the blood circulation

Anti-embolus stockings

These are special stockings that help prevent clotting of the blood in your veins while you are less mobile. The stockings are used in combination with leg exercises and are fitted by your nurse before your surgery. If you currently have leg ulcers, please let your nurse know as the stockings may not be suitable for you.

Wound site - What to expect

Your wound will be an incision in your side. The horizontal suture line (stitches or staples) will be directly below your ribs (on the left or right side of your abdomen, depending on which ureteropelvic junction is being repaired) and will be about 8cms.

After Surgery

You are transferred to the Recovery Room next to the theatre. Your condition is monitored and when you are awake and comfortable a nurse and an orderly will escort you back to the ward on your bed.

On the ward

Your nurse will check the following regularly:

- Vital signs - your blood pressure, pulse, respiration rate and temperature
- The severity and location of any pain or discomfort
- The amount of urine you are producing
- The wound site and wound drains
- The level of numbness that an epidural is producing
- The effectiveness of pain relief
- The amount of oxygen in your blood

You may have

Intravenous fluids

A small tube (leur) is placed into a vein in the forearm to give you fluids and medications.

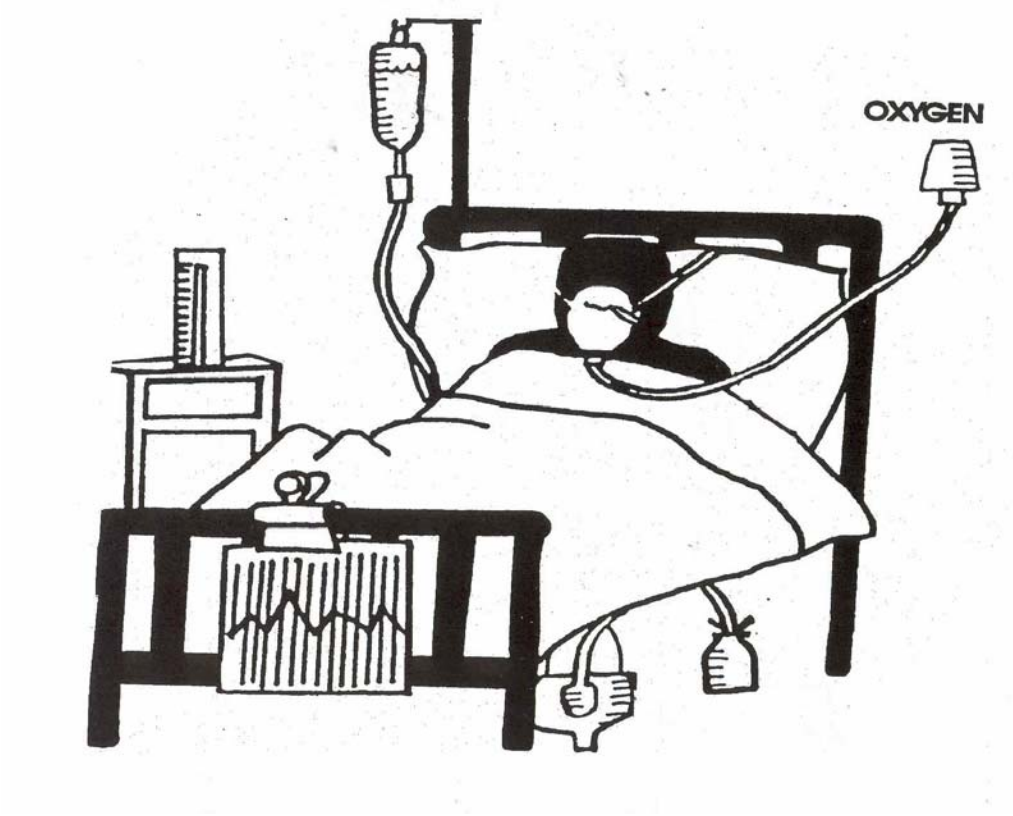
Oxygen

Oxygen is often given for the first 24 hours after surgery via nasal prongs or a facemask to help with breathing and healing.

Urinary catheter

You will have a tube in the urethra (tube through which urine leaves the bladder) that will drain the urine from your bladder. This can be secured to your leg for comfort. After surgery your nurse will monitor your urine output closely in order to check that the urine is flowing down the repaired ureter.

Ureteric stent
You may have a small internal plastic tube in the ureter from the kidney to the bladder. This will keep the ureter open while it is healing and ensure urine drains down the ureter.



Wound drain
You may have a wound drain. This will drain blood and fluids from your operation site thereby promoting healing.

Pain relief after your surgery

Your nurse will work alongside your doctors and the anaesthetist to keep your pain at a minimum.

The **PAIN SCORE** is a way of your nurse establishing how much pain you are experiencing by asking you to grade your pain from 0 to 10 where 0 = no pain and 10 = the worst pain you can imagine.

The following methods of pain relief may be used singly or in combination with each other.

Patient controlled analgesia (PCA)

This infusion machine has a button you press each time you need pain relief. It will help your pain by immediately delivering a specific amount of pain relief into your blood stream. The pump is programmed according to your anaesthetist's instructions.

Epidural

An epidural is a very small tube inserted by your anaesthetist into the epidural space in your back. A local anaesthetic is infused through this tube via a pump for the first few days after surgery relieving pain at your operation site by numbing it.

Intravenous (IV) pain relief

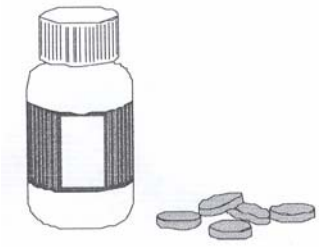
Intravenous pain relief can be administered to supplement a PCA or epidural or on its own to manage pain that is not controlled by tablets or suppositories alone.

Rectal pain relief

Pain may also be controlled by the insertion of suppositories whilst you are not able to take tablets orally.

Oral pain relief

When you are able to drink, you may have tablets by mouth (orally).



Comfort cares after your surgery

To help keep you comfortable your nurse will give you bed washes, linen changes and move you around in the bed regularly.

Medications are available for the relief of nausea and vomiting. You will be given mouthwashes and ice to suck while you are not eating or drinking.

You will be reminded about and assisted with deep breathing exercises. These should be performed every hour while you are awake.

Food and fluids

After your surgery your food and fluid intake will be increased as your bowel function returns to normal. Resumption of a full diet will be gradual starting with sips and progressing to light meals over a day or so. It is important to eat a balanced diet and chew thoroughly and eat slowly. If you have any special dietary needs, a dietician will be involved to assist in your recovery.

Mobility

You will usually be up in a chair for a short time and assisted to walk a short distance within a day or two of your surgery.
Your level of activity will increase as you recover.

Removal of drips and drains

Intravenous fluid

This is removed when you are drinking normally. The leur (plastic tube) is removed when you no longer require intravenous medications.

Wound drain

This is removed when the amount of drainage is minimal and the operation area is healing.

Urinary catheter
This is usually removed a few days after surgery when close monitoring of urine output is not so critical.

Sutures (stitches or staples)
Sutures are usually removed seven to ten days after surgery. If you are not going to be in hospital at this time, you will be given a date for you to arrange for your GP or practice nurse to remove them.

Stent
If you have a stent you will receive an appointment to attend the Urology Outpatient Department after discharge so that it can be removed. The removal is done under local anaesthetic with a flexible telescope that is passed up the urethra to the bladder so that the end of the stent can be grasped. If you have not received a stent removal appointment date within one month of discharge, please contact the Stent Register Administrator via the Urology Outpatient Department. If you are unsure whether you have a stent in place, please check with your nurse prior to discharge.

Discharge Advice

- Try to maintain a fluid intake of one to two litres per day.
- See your GP promptly if you experience chills, fever or pain in your bladder or back, or your urine is cloudy and offensive smelling. These symptoms may be indicative of a urinary tract infection and require treatment.
- The majority of wound strength is reached within the first six weeks after surgery so it is important to avoid strenuous activity, heavy lifting and straining during this period. This includes such things as contact sports, mowing lawns, gardening, vacuuming and lifting heavy washing baskets.

- Sexual activity may be resumed after six weeks or when you feel comfortable to do so.
- Your hospital doctor will provide your first sickness benefit certificate/medical certificate and will advise you when you are able to return to work.

Follow-up

Discharge letter

You and your GP will receive a copy of a letter outlining the treatment you received during your hospital stay. This will be posted to you if it is not completed by the time you leave hospital.

GP (Family doctor)

When you are discharged from hospital you will be under the care of your GP who will look after your general health and monitor your progress.

Outpatients appointments

You will receive an appointment to be seen in Urology Outpatients Clinic approximately three months after your surgery to check that the ureteropelvic junction repair has been successful.

3 References: Mosby's Genitourinary Disorders, Clinical Nursing, Mikel Gray 1992
Urological Nursing 3rd Edition, Urological Nursing' 2004
Campbell's Urology 7th Edition, Urology, 1998