Partial Nephrectomy – Information about your operation (Partial removal of the kidney)

We have written this leaflet to help you understand. It is designed to help you answer any questions you may have. This leaflet contains the following information about your partial Nephrectomy operation:

- Introduction
- Why remove only part of the kidney
- What exactly is done at the operation
- How will my body be affected
- Admission to hospital for your operation
- The day of your operation
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- The recovery period
- Potential risks associated with your operation
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Introduction
The kidneys are a pair of organs at the back of the abdomen that filter the blood to remove waste products, which they convert into urine. From each kidney the urine is carried to the bladder by a tube called a ureter. When the bladder is full the urine passes out of the body through a tube called the urethra (tube that passes urine). The urethra opens immediately in front of the vagina in women and at the tip of the penis in men.
Why remove part of the kidney?
Partial Nephrectomy involves the surgical removal of the tumour and some of the surrounding kidney tissue in order to remove the cancer whilst preserving as much of the functional units of the kidney which help to filter the kidney, this is known as “nephron sparing surgery”.

Partial Nephrectomy is usually performed in patients with small tumours of the kidney (usually 5cm), that appear to be isolated to one kidney or in:
- Patients with small tumours on each side
- Patients with one kidney
- Occasionally it may be necessary in patients whose kidney function maybe impaired and might be further reduced by removal of the total kidney. For example some diabetic patients or those with hypertension.
- Partial Nephrectomy could also be considered a benefit for some patients who have a normal functioning kidney on the other side.

It is important that you understand the exact nature of the operation when the surgeon discusses it with you. If you have any questions about your treatment, don’t be afraid to ask your doctor or the nurse looking after you.
If you are a smoker it is important that you stop smoking prior to the surgery as this will help with your breathing and circulation afterwards.

What exactly is done at the operation?
The operation usually involves an incision (a cut) that is made between the lower ribs on the side of the affected kidney. Your surgeon will discuss the best incision with you for the kind of operation that you need for your condition. Sometimes a part of a rib will be removed; the surgeon will remove the affected part of the kidney, with a small amount of surrounding kidney tissue.

How will my body be affected?
In most cases you will still have one remaining functioning kidney, and a portion of the kidney which has been operated on, which will continue to work. Before your operation to remove your kidney tumour, you will undergo some tests to check the function of the kidneys. Patients with single kidneys are usually referred to a Consultant Nephrologists (medical doctor specialising in kidneys) for discussions regarding renal dialysis prior to surgery.
Admission to hospital for your operation
You will come to hospital the day before your operation for a stay of about 5 to 7 days.
On your admission day you will usually be admitted to ward F3 where you will meet the nursing and medical staff who will be looking after you.
There will be an opportunity to meet the anaesthetist who will discuss pain relief following your surgery and the various options available to you. The physiotherapist, who will take part in your care, will teach you post operative breathing exercises.

THE DAY OF YOUR OPERATION
Before you go to theatre you will have nothing to eat for 4 to 6 hours and nothing to drink for 2 hours before the operation, apart from any prescription medicines you may be taking. The anaesthetist will discuss exactly which tablets you will be able to take. We will also give you some tablets as part of the preparation for your anaesthetic: the 'pre med'.

AFTER YOUR OPERATION
When you come out of theatre, you will be transferred to the recovery area for an hour or two. You will then be transferred back to your ward.
In some cases it maybe necessary for you to be nursed in the high dependency unit (HDU) until you are ready to return to the main ward. The purpose of your stay in HDU is to enable close monitoring of your condition.

To reduce the pain after your operation the ward staff will give you pain killers. The anaesthetist will already have discussed options with you. Either:

1. A pain killer device that you control, that releases pain killers into your bloodstream via a drip (Patient Controlled Analgesia) PCA, or
2. An epidural by which pain killers and local anaesthetic are given directly into the spinal nerve system, through a fine plastic tube in your back.

After about two days the need for these types of pain killers is greatly reduced, and you will be able to have these systems removed. The ward staff will then give you pain killing tablets or injections instead. Please tell your nurse looking after you if you are still in pain or discomfort.

You will have a drip running into a vein, to give you fluids until you are able to drink normally, usually the next day. You will gradually increase your fluid and food intake over the next few days. The drip will then be removed

As well as a dressing over your wound, there will also be a small plastic drain tube, attached to a wound drainage bag which will collect blood stained fluid from your wound site. This will usually be removed 3 to 5 days after your operation.
You will also have a urinary catheter, which makes it easier for you to pass urine, and also your nurse will be able to measure how much urine you pass. This will be removed when you are more mobile. You may require a chest drain, and your surgeon will discuss this with you before your operation.

**The recovery period**
You will be encouraged to breathe deeply after your operation and move your legs in bed, the nursing staff will help you to get out of bed on the first or second day after your operation and help you start walking soon after this. Normally you are up and about independently about 2 to 3 days after surgery. The wound dressing will be removed after 48 hours or sooner if necessary. The stitches or clips will be removed by the district nurse 10 days after your operation.

**Potential risks associated with your operation**
- Chest infection, this may occur as a complication of your anaesthetic. You can help prevent this by breathing deeply.
- Pneumothorax (Lung collapse). This is because the incision is close to the ribs. If this occurs you may need a chest drain in this area. This is rare.
- DVT or pulmonary embolism (Blood clot in the leg or the lung). This may result from compression of the blood vessels during surgery. This is a rare occurrence, and moving your legs and feet will help prevent this. You may also be given injections to thin your blood for a few days. You may be given special stocking to wear before theatre.
- Wound infection
- Bruising in the wound
- Bleeding and the need for a blood transfusion
- Injury to nearby tissue
- Poor wound healing or weakness in the wound site
- Urine infection: this is more likely if a catheter is present. We will assist you if you need help to keep the area clean. Your catheter will be removed as soon as it is no longer necessary.
- When the surgery is more complex some patients may need renal dialysis (this is a procedure to remove waste products from the blood) following the operation.
- In a small percentage of patients it maybe necessary to remove the whole kidney during the operation.
Preparation for home
When you are nearly ready for home, we will make arrangements for your discharge home. The nurses on the ward will arrange for a district nurse to visit you at home whilst you are recovering. We will give you a letter for your GP and you should have a week’s supply of any medications you have been prescribed. An outpatient appointment will normally be made for you to be seen 6 weeks after your discharge home.

GETTING BACK TO NORMAL
Recovery time after this type of surgery varies but generally you should feel improvements from between 2 to 3 weeks. This may take longer where the surgery has been more complex. The wound may be sore for this time and can take up to 8 weeks to heal fully
- During the first 6 weeks you should not drive.
- Getting back to work will depend on the type of job that you do. Please ask your surgeon if you are unsure.
- During this time you should not attempt to lift heavy objects or do anything that might put a strain on your wound.
- Drink plenty of fluids and pass urine regularly; this will help look after your remaining kidney.
- The ward clerk can give you a sick note for the time you are in hospital. Your GP can then supply you with any further sick notes. If you have any concerns about your planned surgery, your surgeon or specialist nurse will be happy to discuss them with you.

CONTACTING THE HOSPITAL
If you have any worries or you would like advice, you can contact the Urology Specialist Nurses:

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0161 217 3906


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