# Kidney Cancer | Kidney Cancer | Surgery

## What is kidney cancer?

Kidney cancer is a disease of the kidney, where normal cells start to grow abnormally and form a lump, known as a tumour. Renal cell carcinoma (RCC) is the most common form of kidney cancer. In most cases only one kidney is affected, but in some rare cases, kidney cancer can occur in both kidneys.

Urothelial carcinoma is a much less common type of <u>kidney cancer</u>. It grows from the internal lining of the kidney or ureter and has similarities to bladder cancer.

## What are the symptoms of kidney cancer?

In the early stages, kidney cancer may not produce any symptoms in the patient. Larger or more advanced tumours may produce symptoms including:

- Blood in the urine (known as haematuria)
- Feeling pain or a dull ache in the side of the lower back
- A lump may be felt in the abdomen
- Persistent tiredness
- Unexplained, sudden weight loss
- Fever that is unrelated to a cold or flu

# How is kidney cancer diagnosed?

Most kidney cancers are detected incidentally as a small renal mass on an ultrasound or CT scan performed for another reason. The diagnosis can usually be made on CT scan however you may require further scans including bone scan, PET scan or even a biopsy prior to undergoing treatment.

## What are the treatment options for kidney

## cancer?

The Urologists at Melbourne Urology Centre will take into consideration your personal circumstances in order to determine the most appropriate treatment. This will include an assessment of your overall health, the health of the other kidney as well as the size and location of the tumour within the kidney.

#### **KIDNEY CANCER SURGERY**

Kidney Cancer Surgery to remove the tumour is the most common treatment for kidney cancer (renal cell carcinoma) that has not spread outside the kidney to other parts of the body.

Depending on the type, stage and grade of the kidney cancer, and your general health, there are different types of kidney cancer surgery that may be considered. The two major types of kidney cancer surgery are known as radical nephrectomy and partial nephrectomy. In radical nephrectomy, the entire affected kidney is removed. This is commonly performed for treatment of renal cell carcinoma. Partial nephrectomy involves removing only the affected part of the kidney. It is sometimes an option for patients that have a small tumour in one kidney, cancer in both kidneys, or patients who only have one working kidney.

# How is kidney cancer surgery performed?

Kidney cancer surgery is performed in hospital under general anaesthetic. Depending on the type of surgery that you are having (radical or partial nephrectomy), your surgeon will use one of the following surgical methods to remove either all or part of the affected kidney. Prior to your surgery, your surgeon will discuss with you in detail the particular advantages of the approach that they intend to take, and any risks that are associated with the procedure.

### Laparoscopic kidney cancer surgery

Laparoscopic kidney cancer surgery is also sometimes referred to as keyhole kidney cancer surgery. Small incisions are made in the abdomen, where the surgeon inserts the laparoscope (small light and camera), which takes video images of the inside of the patient's body and displays

them on a screen. Using these images as guidance, the surgeon inserts surgical instruments into the incisions and performs the surgery.

#### Robotic kidney cancer surgery

Robotic-assisted surgery is a type of laparoscopic surgery used to treat kidney cancer. Small incisions are made in the abdomen so that the camera and instruments may be inserted in order to perform the surgery. This technique allows magnification of between 10-12x and the use of precision robotic instruments, giving the surgeon enhanced vision and incredibly precise control. The specialist surgeons at Melbourne Urology Centre are fully trained and qualified in performing robotic surgery. Robotic laparoscopic surgery offers a number of benefits to patients, including less trauma, shorter ischaemia time, less blood loss and a faster recovery. At all times, the surgeon is 100% in control of the robotic instruments.

#### Open surgery for kidney cancer

These days open surgery for kidney cancer treatment should be reserved only for very large or complex kidney tumours which may involve the large blood vessels in the abdomen. This surgery involves the surgeon making an incision in the abdomen in order to remove the affected kidney.

At Melbourne Urology Centre we will always attempt to perform surgery with a minimally invasive approach when safe to do so and where possible will remove only the tumour and preserve the remainder of the normal healthy kidney (robotic partial nephrectomy).

Melbourne Urology Centre's expert team of specialist urologists are experienced and specialized in robotic laparoscopic kidney cancer surgery. Our team is committed to providing their patients with the highest quality, individualized treatment, for the best chance at a successful outcome. If you have any questions or you would like further information regarding kidney cancer surgery, contact our reception so they may assist you to make an appointment.

#### General health and wellbeing after kidney cancer surgery

The surgeons at Melbourne Urology Centre understand that a kidney cancer diagnosis can be a very stressful and life-changing event. Whilst

great surgical outcomes are critical, this is only one component of overall patient care.

It is important to look after your remaining kidney and perioperatively a specialist medical physician will be closely involved to monitor and follow your progress.

For your kidney health it is important to ensure good blood pressure and cholesterol control, regular daily exercise, a healthy well-balanced diet and where relevant good control of diabetes and quitting smoking.

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Kidney Health Australia, (2016), Fact Sheet: Diagnosis an Types of Kidney Cacer, [https://kidney.org.au/uploads/resources/kidney-health-australia-fact-sheet-diagnosis-and-types-of-kidney-cancer.pdf], accessed 18/02/21.

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