# **Early Stage Kidney Cancer**



This fact sheet talks about the treatments for kidney cancer that has not spread outside the kidney to other parts of the body. A small kidney tumour (less than 7 cm) that has not spread is called stage 1 kidney cancer. Stage 2 kidney cancer is larger than 7 cm and has not spread outside the kidney. Stages 1 and 2 are called early-stage or localised kidney cancer. A tumour that has started to spread to nearby lymph nodes, blood vessels, or the fat surrounding the kidney is called stage 3 kidney cancer. Stage 3 kidney cancer is called locally advanced kidney cancer.

# My cancer has not spread outside the kidney: What treatments could I have?

### **Active surveillance**



If you have slow-growing or small (stage 1) kidney cancer and you don't have any symptoms, you may be offered active surveillance. You might also have active surveillance if you have other health

problems, or only one kidney. This involves frequent scanning of the kidney to monitor for any growth or until you have symptoms.

If you are on active surveillance, you can decide to have treatment at any time. For example, you may decide to have treatment if the cancer starts to grow, if you start having symptoms, or if the situation becomes too stressful for you and your family.

Active surveillance delays the start of treatment. By delaying the start of treatment, you may be able to delay potential treatment side effects and have a better quality of life. If your kidney cancer is small (less than 4 cm) and slow growing, a delay in starting treatment may not affect your overall survival. Small, slow-growing kidney cancers are unlikely to spread to other parts of the body.

### Surgery



If kidney cancer is diagnosed early, then surgery can be a cure and is often the first treatment for kidney cancer. Surgery to remove a kidney is called nephrectomy.

It is performed by a specialist surgeon called a urologist.

When the whole kidney is removed, it is called a radical or total nephrectomy. If only part of your kidney is removed, it is called a partial or nephron-sparing nephrectomy. You will be given a general anaesthetic for both radical and partial nephrectomy.

A radical nephrectomy is often used for stage 2 tumours (greater than 7 cm) in the kidney or for tumours that have started to spread to nearby lymph nodes, blood vessels, or the fat surrounding the kidney (stage 3). You can live perfectly well with just one working kidney.

Partial nephrectomy is often used for stage 1 tumours (less than 7 cm), if you only have one kidney, kidney disease, or tumours in both kidneys (bilateral kidney cancer). Partial nephrectomy aims to save healthy kidney tissue and keep kidney function. However, partial nephrectomy needs an experienced surgeon and is not available at all hospitals.

Surgery can be done with a large cut across the abdomen (an open nephrectomy) or using keyhole surgery (a laparoscopic nephrectomy). Keyhole surgery has faster recovery and needs a shorter hospital stay. Robot-assisted laparoscopic surgery uses robotic arms, which the surgeon controls from a workstation. The surgeon has a better view of the tumour, and the advanced tools give the surgeon more accuracy and control.

## **Ablation**



Surgery is not possible for some people because of their age or other medical problems. However, it may be possible to treat early-stage kidney cancer using ablation. Ablation is the destruction of

body tissue. Extreme heat or cold can be used to destroy kidney tumours. The doctor inserts fine needles or probes through the skin and into the tumour. A very cold gas or an electric current is passed through the needles to freeze or heat the tumour, respectively.

- Radiofrequency ablation and microwave ablation use an electric current to produce extreme heat to destroy the tumour.
- Cryoablation or cryotherapy uses liquid nitrogen, carbon dioxide or argon gas to freeze and destroy the tumour.

# **Early Stage Kidney Cancer**



# Radiotherapy



Stereotactic ablative radiotherapy (SABR) is a special form of radiotherapy that uses a high dose of radiation targeted at the tumour. This aims to kill all the cancer cells in that area while limiting damage to surrounding healthy tissue.

# Is there any treatment to stop the cancer coming back after surgery?

The aim of adjuvant treatment is to reduce the risk of the cancer spreading and the cancer coming back after surgery. Adjuvant treatment is medication given to people who are at higher risk of their cancer spreading or coming back (recurrence). Adjuvant treatment is given for a year after surgery to try and prevent the cancer from coming back. Treatments change frequently, so ask your patient organisation what is available in your country.

# Follow-up after treatment

When you have finished treatment, you should be followed-up to make sure your cancer has not returned and to check for spread of the cancer to other parts of your body. This usually involves regular scanning and blood tests.

You will usually see a member of your hospital team every 3-4 months during the first year after treatment, and once or twice a year after that. At these visits, your doctor will ask you about side effects from treatment and you will have scans to check that your cancer has not returned (recurred) or spread (metastasised) to another part of your body.

The chance of the cancer returning is highest soon after treatment. However, your hospital team will want to check up for several years, depending on the healthcare policy in your country. Your kidney cancer patient organisation can refer you to the guidelines for kidney cancer follow-up that apply in your country.



# Good to know!

#### **Ablation**

The destruction of body tissue. Extreme heat, cold or radiation can be used to destroy kidney tumours.

### **Adjuvant treatment**

A treatment given in addition to the main treatment (for example, targeted therapy as well as surgery) to try to prevent cancer from coming back or spreading. Its purpose is to assist the main treatment. Also called adjunct/adjunctive therapy.

# Localised

Restricted to the primary (original) site, without evidence of spread. A localised kidney cancer is confined to the kidney.

#### MRI

Magnetic Resonance Imaging is a scan used for the diagnosis of cancer.

### Metastasise

To spread from one part of the body to another.

### Nephrectomy

The surgical removal of all or part of the kidney. *Radical or total nephrectomy:* The surgical removal of the whole kidney and the surrounding fat. *Partial or nephron-sparing nephrectomy:* The surgical removal of part of the kidney containing the tumour along with a small amount of normal (cancer- free) kidney surrounding the tumour.

#### **Pathologist**

A doctor who identifies disease by studying cells and tissues under the microscope.

#### Recurrence

Cancer that has come back, usually after a time during which it could not be detected. The cancer may come back to the same place as the original (primary) tumour or to another place in the body.

## Urologist

A surgeon who specialises in treating diseases of the genitourinary system.

For more information about the treatment options for kidney cancer, read

My Treatment My Choice small renal masses and My Treatment My Choice locally advanced kidney cancer on the IKCC website.

# Distributed by:



IKCC Factsheet Version 2.0: November 2023 Copyright by IKCC