

# About Kidney Cancer - A Quick Guide

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This is a brief summary of the information on 'About kidney cancer' from CancerHelp UK. You will find more detailed information on the website.

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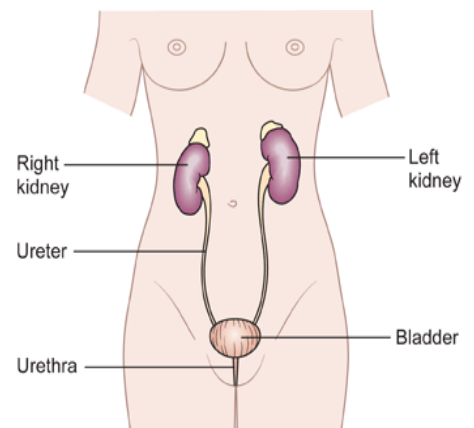


Diagram showing the female urinary system  
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## The kidneys

The kidneys are two bean-shaped organs about the same size as a fist. They are located near the middle of the back, one on either side of the spine. The kidneys are part of the body system called the urinary system. They filter the blood. As the blood passes through them, waste products and unneeded water are collected and turned into urine. This happens in tiny tubes called nephrons. Each kidney has about 1 million nephrons.

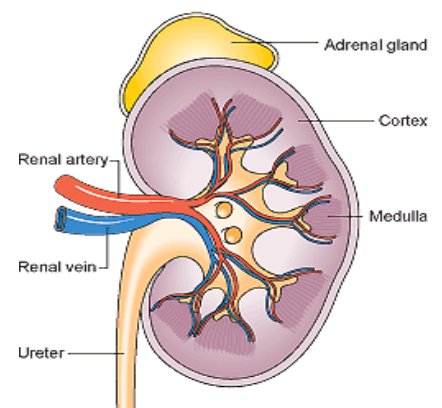


Diagram showing the parts of a kidney  
© CancerHelp UK



The urine drains into the bladder down a tube called the ureter. There are 2 ureters – one from each kidney. Another tube called the urethra carries the urine from the bladder out of the body.

### Hormones

The kidneys also produce three important hormones. Erythropoietin (EPO) tells the bone marrow to make red blood cells. Renin regulates blood pressure. Calcitriol (a form of Vitamin D) helps the intestine to absorb calcium from the diet.

### The adrenal glands

Above each kidney, there is a small gland called the adrenal gland. The adrenal glands make several hormones that are vital for life. If you have a kidney removed, you may have the adrenal gland above it removed too. You can manage perfectly well with one adrenal gland, but if both are removed you will need to take hormone tablets every day.

### Risks and causes of kidney cancer

Kidney cancer is now the 8th commonest cancer in men in the UK and the 9th most common cancer in women (excluding non melanoma skin cancer). Nearly 2 out of 3 people diagnosed are over 65 years old. Kidney cancer is rare in people under 50. It affects many more men than women. This could be because in the past more men smoked cigarettes.

There are some kidney cancer risk factors we know about. These are

- Smoking - if you smoke your risk could be double that of a non smoker
- Faulty genes - some people inherit a tendency to develop kidney cancer (hereditary or familial kidney cancer)

- Certain inherited conditions
- Having a relative with kidney cancer
- Being obese
- Having kidney disease that needs dialysis
- Hepatitis C infection
- Having a relative with kidney cancer
- Previous treatment for testicular cancer or cancer of the neck of the womb (cervix)

Other risk factors that have been investigated and may increase risk include high blood pressure and heavy use of mild painkillers, such as non steroidal anti inflammatory drugs (NSAIDs) such as aspirin, paracetamol, and ibuprofen.

### Screening for kidney cancer

Screening means testing people for the early stages of a disease before they have any symptoms. But before screening for any type of cancer can be carried out, doctors must have an accurate test to use. The test must be reliable in picking up cancers that are there. And it must not give false positive results in people who do not have cancer. At the moment there is no reliable screening test for kidney cancer for the general population.

If one of the inherited syndromes that increase the risk of kidney cancer runs in your family, you may be offered screening. This means having an ultrasound or MRI scan of your kidneys every year. Further genetic tests may become available in the future.

### Symptoms of kidney cancer

When kidney cancer first starts to develop, there are often no obvious symptoms. Increasingly, kidney cancers are being picked up on ultrasound scans that are done for



other reasons. So they are being found at an earlier stage. Once the cancer begins to grow, the symptoms can become more obvious.

### **Blood in the urine**

This is the most common symptom of kidney cancer. Your doctor may call this haematuria. About half of those diagnosed with kidney cancer will have this symptom when they first go to the doctor.

Sometimes the blood cannot be seen by the naked eye but can be picked up by a simple urine test. If you ever see blood in your urine, you should go to the doctor. But most people who have blood in the urine do not have kidney cancer. In most cases it is caused by an infection, enlargement of the prostate or kidney stones.

### **A lump**

Most kidney cancers are too small to feel. But see your doctor straight away if you feel a lump or swelling in the area of your kidneys.

### **Other symptoms**

Some people have other vague symptoms including tiredness, loss of appetite, weight loss, high temperature with very heavy sweating, a pain in the side that won't go away, or a general feeling of poor health. But remember that all these symptoms can be caused by many other conditions that are not cancer.

## **Types of kidney cancer**

### **Renal cell cancer**

Renal cell cancer is the most common type of kidney cancer in adults. More than 8 in every 10 (80%) kidney cancers diagnosed in

the UK are this type. Renal cell cancer is also called renal adenocarcinoma or hypernephroma. In renal cell cancer the cancerous cells are found in the lining of the tubules (the smallest tubes inside the nephrons that help filter the blood and make urine).

There are several different types of renal cell cancer. The most common is called clear cell. All types of renal cell cancer are treated in the same way.

### **Other types of kidney cancer**

Another type of kidney cancer is called transitional cell cancer (TCC) of the renal pelvis. It is less common. About 7 or 8 out of every 100 (7 to 8 %) kidney cancers diagnosed in the UK are TCCs. The treatment for this type of kidney cancer is similar to the treatment for bladder cancer.

A type of kidney cancer called Wilms' tumour can affect children. This is different from kidney cancer in adults.

### **Guidelines for seeing a kidney cancer specialist**

It can be very difficult for GPs to decide who may have a suspected cancer and who may have something much less serious. The National Institute for Health and Clinical Excellence (NICE) have produced guidelines for GPs to help them decide which patients need to be seen urgently by a specialist.

### **Guidelines for urgent referral**

According to Department of Health guidelines, you should ideally get an appointment within 2 weeks for an urgent referral. The symptoms that NICE say need urgent referral are



- Blood in your urine, with no symptoms of urine infection (like pain, frequency or urgency of passing urine)
- Blood in the urine with other symptoms, after urine infection has been ruled out
- Urine infection that won't go away or keeps coming back, and with blood in the urine, in anyone over 40
- Very small amounts of blood in the urine for no apparent reason, and you are over 50
- A lump in your abdomen (either on a scan or felt by your doctor) that your GP thinks could be related to your urinary tract

### If you are still worried

If you are concerned that your GP is not taking your symptoms as seriously as you think he or she should, you could print this page and take it along to an appointment.

### What to ask your doctor about kidney cancer

- How will I know if I have kidney cancer?
- Am I more likely to get kidney cancer than anyone else
- I used to smoke. Does this mean I am more likely to get kidney cancer?
- Can my work affect my chances of getting kidney cancer?
- I get a lot of urine infections. Does this mean I have more chance of getting kidney cancer?

- Can I be screened for kidney cancer?
- One of my parents had kidney cancer. Does this increase my risk of getting it?
- What type of kidney cancer do I have?

### More information

For more information about kidney cancer, visit our website <http://cancerhelp.cancerresearchuk.org>

You will find a wide range of detailed, up to date information for people affected by cancer, including a clinical trials database that you can search for trials in the UK. You can view or print the information in a larger size if you need to.

For answers to your questions about cancer call our Cancer Information Nurses on **0808 800 4040** 9am till 5pm Monday to Friday

Adapted from Cancer Research UK's Patient Information Website CancerHelp UK in May 2011. CancerHelp UK is not designed to provide medical advice or professional services and is intended to be for educational use only. The information provided through CancerHelp UK and our nurse team is not a substitute for professional care and should not be used for diagnosing or treating a health problem or disease. If you have, or suspect you may have, a health problem you should consult your doctor. © Cancer Research UK 2011. Cancer Research UK is a registered charity in England and Wales (1089464) and in Scotland (SC041666).