

Treating Kidney Cancer - A Quick Guide



Contents

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

In this information there are sections on

- Stages of kidney cancer
- Statistics and outlook
- Which treatment for early stage kidney cancer
- Which treatment for advanced kidney cancer
- Which treatment for kidney cancer that comes back
- Surgery
- Radiotherapy
- Biological therapy
- Chemotherapy
- Controlling the symptoms of kidney cancer
- Follow up for kidney cancer
- Kidney cancer research
- Questions for your doctor

Stages of kidney cancer

The stage of a cancer tells the doctor how far it has spread. Treatment is often decided according to the stage. Cancer stage can be written using number stages or using the TNM system. The T stands for

tumour, the N for nodes and the M for metastases (cancer spread).

TNM stages

In stage T1 the tumour is no more than 7cm across and is completely inside the kidney. In T2 it is larger but still completely inside the kidney. In T3 it has spread to the tissues immediately surrounding the kidney. In T4 it has spread further away.

N0 means there is no cancer in any lymph nodes. In N1 the cancer has spread to one nearby lymph node only, and in N2 to more than one. M1 means the cancer has spread and M0 means it has not. If it has spread it is called advanced kidney cancer.

Number stages

Stages 1 and 2 are the same as T1 and T2, above. In stage 3 the cancer has grown into the adrenal gland, or one of the major veins nearby. It is in no more than one nearby lymph node. In stage 4 the cancer has grown into the surrounding tissues and there is more than one lymph node containing cancer cells, OR the cancer has spread to another part of the body.

Grade

The more abnormal cancer cells look under the microscope, the higher their grade.



Low grade cancers usually grow more slowly and are less likely to spread.

Statistics and outlook for kidney cancer

Outlook means the likely outcome of your disease and treatment. Your doctor may call this your prognosis. With kidney cancer, the likely outcome depends on how advanced the cancer is when it is diagnosed (the stage). The grade can also be important.

On CancerHelp UK, we have quite detailed information about the likely outcome of different stages of kidney cancer. The statistics we use are taken from a variety of sources, including the opinions and experience of the experts who check every section of CancerHelp UK. They are intended as a general guide only. For the more complete picture in your case, you'd have to speak to your own specialist.

How reliable are cancer statistics?

No statistics can tell you what will happen to you. Your cancer is unique. The same type of cancer can grow at different rates in different people. The statistics cannot tell you about the different treatments people may have had, or how that treatment may have affected their prognosis. There are many individual factors that will affect your treatment and your outlook.

Which treatment for early stage kidney cancer

Surgery

Surgery is the main treatment for kidney cancer that has not spread. Stage 1 and 2 kidney cancer is often cured with surgery. Even some stage 3 cancers can be cured if it is possible to remove all the cancer.

Removing a kidney is called a nephrectomy. Radical nephrectomy means removing the whole kidney. Partial nephrectomy means removing part of the kidney.

Radiotherapy

Radiotherapy uses high energy rays to destroy cancer cells. It is not often used with kidney cancer that is likely to be curable, but it may help to control pain or bleeding.

Biological therapy

Biological therapies use natural substances from the body, or drugs made from these substances. This includes interferon and interleukin (IL-2) which are being looked at in clinical trials.

Arterial embolisation

Arterial embolisation cuts off the tumour's main blood supply by blocking the blood vessels. This may shrink the cancer but it is not a cure. Your specialist will inject pieces of gelatine sponge or plastic beads into the main blood vessels to the kidney.

Experimental treatments

These include freezing the tumour (cryotherapy), killing the tumour with heat (radio-frequency ablation) and high intensity ultrasound (HIFU).

Which treatment for advanced kidney cancer

Kidney cancer is called advanced if it has spread away from the kidney. Local spread means it has spread to tissues nearby. Cancer that has spread to another part of the body is called a secondary cancer or metastasis.

If you have advanced kidney cancer, the aim of your treatment is to try to slow down



the growth of the cancer. And to reduce or relieve any symptoms you have. Which treatment you have will depend on how much the cancer has spread, where it has spread to, the treatment you have already had, and how fit and well you are.

Surgery

If your cancer has spread to only one other site, your doctor may suggest surgery to remove either your kidney alone, OR your kidney and the secondary cancer. On CancerHelp UK there is more information about types of surgery for kidney cancer.

Other treatments

Other possible treatments for advanced kidney cancer include

- Biological therapy
- Radiotherapy
- Embolisation
- Chemotherapy

Which treatment for kidney cancer that comes back

Sometimes kidney cancer can come back after surgery, even if your doctor hoped it might be cured. If it does, the treatment you have will depend on your general health and where in your body the cancer has spread. The aim is to try to control or slow down the growth of the cancer. And to lessen or remove any symptoms you have. Unfortunately, treatments do not often cure kidney cancer that has spread.

Surgery

If your cancer has only spread to one other area of your body, and you are in otherwise good health, you may be able to have surgery.

Other treatments

Embolisation is a way of cutting off the blood supply to an area. Other possible treatments include radiotherapy and biological therapy. Some recurrent kidney cancers respond to hormone therapy tablets called medroxyprogesterone (Provera). But these days, hormone treatment is not used so much.

Deciding about treatment

With advanced cancer it can be difficult to decide which treatment to try, or whether to have treatment at all. You may want to take into consideration your quality of life while you are having the treatment. Most importantly, you will need to understand what can be achieved with the treatment you are being offered. Your doctor will discuss the options with you. You may also wish to talk things over with a close relative or friend, or with a counsellor or specialist nurse at the hospital.

Questions for your doctor about kidney cancer treatment

- What are the treatment options for my stage of cancer?
- Is my cancer curable?
- Where is my nearest specialist cancer centre?
- What is the aim of the treatment you are recommending for me?
- What are the risks and benefits of the treatment you are recommending?
- What are the side effects?
- Is it possible to have a second opinion?
- Are there any clinical trials that might be suitable for me?
- Will I need to have any more treatment in the future?



Types of surgery for kidney cancer

Curing cancer that has not spread

To do this, it must be possible to remove the cancer completely. Stage 1 and 2 cancers are most likely to be curable with surgery. It is sometimes possible to cure stage 3 cancers with surgery if the surgeon can get all the cancer out. Removing the kidney is called nephrectomy. You may be able to have 'keyhole' surgery.

- In radical nephrectomy the surgeon will remove the whole kidney with the tissues around it, including the adrenal gland. Some lymph nodes will also be removed
- Partial nephrectomy means removing the cancer and part of the kidney surrounding it. You will have some working kidney left after the operation. You may hear your doctor call this 'nephron sparing surgery'

After surgery

If your surgeon is satisfied that all the cancer has been removed, you won't need any further treatment. If the surgeon is concerned that some cancer cells may have been left behind, you may have immunotherapy. Or you may be offered a course of radiotherapy.

Relieving symptoms or removing cancer spread

Even if your cancer is unlikely to be cured with surgery, it may still be worth having an operation to remove the kidney to relieve symptoms. It is sometimes possible to remove cancer that has spread. This is very specialist surgery and the type of operation will depend on where it has spread to.

Having your kidney cancer operation

Before your operation you will have various tests to check your general health. Your nurse will teach you breathing and leg exercises to do after the operation to prevent chest infections and blood clots. Your surgeon, anaesthetist, physiotherapist and nurse will all come to talk to you about what will happen during and after the operation. Do ask as many questions as you need to.

Immediately after your operation

When you wake up, you will have several different tubes in place. You will have a drip into your arm, and one or more drainage tubes from your wound. You will have a tube down your nose into your stomach (nasogastric tube) to drain it and stop you feeling sick. And a tube into your bladder (catheter) to measure your urine output.

Painkillers

If you have open surgery, you will almost certainly have pain for the first week or so. There may be less pain with keyhole surgery. It is important to tell your doctor or nurse as soon as you feel any pain. They need your help to find the right type and dose of painkiller for you.

Making progress

After a few days you will be able to get up and about. Usually people are eating normally 2 to 3 days after this type of operation. About a week after your operation, you should be just about ready to go home.



Questions for your doctor about surgery for kidney cancer

- Will I need surgery?
- What kind of operation will I need?
- Will all of the cancer be removed during the operation?
- Is it possible for me to have part of my kidney removed instead of all of it?
- Is it possible for me to have keyhole surgery (laparoscopic surgery)?
- Should I have my surgery done by a specialist urological surgery team?
- Will I have any pain after my operation?
- Will I have any other side effects from the surgery?
- Will there be any permanent side effects?
- Are there any things I can do to help myself get better after my surgery?
- Will I need any other treatment after my surgery?
- Do you expect this treatment to cure my cancer?
- What are the chances of my cancer coming back?
- What will happen if my cancer comes back?
- Why do you think this is the best treatment for me?
- What other types of treatment could I have?
- How often will I have to come for follow up appointments?
- For how long will I need follow up?
- At what point can I consider myself cured?

Radiotherapy for kidney cancer

Radiotherapy uses high energy X-rays to kill cancer cells. It is not used often for cancer of the kidney because kidney cancer cells

are not as sensitive to radiation as some other types of cancer.

Your doctor may suggest radiotherapy to help control the symptoms of an advanced cancer. Doctors also use it to treat kidney cancer that has spread to the brain. There is more about brain radiotherapy on CancerHelp UK.

How and where you have treatment

You have radiotherapy treatment in the hospital radiotherapy department as an out patient. You usually have radiotherapy as a series of daily treatments. You may have one treatment a day for a few days, or a few treatments with a few days break between each.

Radiotherapy is carefully planned. At your first visit you will usually be asked to lie under a large machine called a simulator. The actual treatment only takes a few minutes. It does not hurt. It does not make you radioactive.

What are the side effects?

You may not have many side effects. If they happen, the side effects of radiotherapy to the kidney are feeling or being sick, diarrhoea, and skin reddening and loss of body hair in the treatment area. If you feel sick, you can be given an anti-sickness drug. Radiotherapy often makes you feel tired. There is more information in the 'radiotherapy' section of CancerHelp UK.

About biological therapy for kidney cancer

Biological therapy is treatment that changes the activity of substances made naturally in the body. These therapies can control or destroy cancer cells. Some types work by



encouraging the immune system to attack cancer cells. Various types of biological therapy are used for kidney cancer including sunitinib, interferon and interleukin (IL-2).

You may have biological therapy for kidney cancer that has already spread, or is at high risk of coming back after it has been removed surgically.

Biological therapies can work well at controlling the cancer for some people. There is a lot of research going on to try to find out why certain patients do so well.

Biological therapy drugs for kidney cancer

Interferon

Interferon is known as immunotherapy. It can help to stop cancer cells growing and boost the immune system to attack the cancer. It may also restrict the blood supply to the cancer cells. You are most likely to have interferon for kidney cancer that has spread. But researchers are also using it in clinical trials after surgery to remove early stage kidney cancer. The most common side effects are flu like symptoms during the first week or two of treatment.

Interleukin 2

Interleukin is also called IL-2 or aldesleukin. It is produced in the body, but can now be made in laboratories. It is most often used for advanced kidney cancer, but it is also being looked at in clinical trials to see if it lowers the risk of kidney cancer coming back after surgery. The side effects are similar to those of interferon, but likely to be worse.

Sunitinib

Sunitinib is also called Sutent. It is a type of drug called a tyrosine kinase inhibitor (TKI). Trials have shown that sunitinib can stop or slow the growth of advanced kidney cancer. The side effects include tiredness, diarrhoea, a sore mouth and changed taste, as well as a raised blood pressure.

Other biological therapies

Other biological treatments such as pazopanib (Votrient), bevacizumab (Avastin), sorafenib (Nexavar), temserolimus (Torisel) and everolimus (Afinitor) are being used for kidney cancer. But they are not widely available on the NHS. You may have them as part of a clinical trial.

Questions for your doctor about biological therapies for kidney cancer

- Would biological therapy help me?
- What biological therapies are available?
- Why have you recommended biological therapy for me?
- What are the side effects likely to be?
- How long will I be treated for?
- What do you hope the treatment will do for me?
- Do you use interferon to treat kidney cancer in this hospital?
- Do you use aldesleukin (IL-2) to treat kidney cancer in this hospital?
- Does this health authority pay for biological therapy for kidney cancer?
- Are there clinical trials that you know of using biological therapy for kidney cancer?
- Are there any trials that you know of that might suit me?
- Can you help me to find a clinical trial that would suit me?



Chemotherapy for kidney cancer

Chemotherapy uses anti-cancer or 'cytotoxic' drugs to destroy cancer cells. These work by disrupting the growth of cancer cells. As they circulate in the blood, they can reach cancer cells wherever they are in your body.

Chemotherapy for renal cell cancer

Chemotherapy is not a standard treatment for the commonest type of kidney cancer – renal cell cancer. Chemotherapy isn't generally used for renal cell cancer because, so far, other types of treatment such as biological therapies work better. But new drugs are being developed all the time and new combinations of treatments being tried. There are trials looking into combining biological therapies with chemotherapy.

Chemotherapy for transitional cell cancer

Chemotherapy is used more often for a type of cancer called transitional cell cancer, which can grow in the kidney, bladder or connecting tubes of the urinary system (the ureters). This type of cancer behaves more like bladder cancer, and so you may find the chemotherapy for bladder cancer section of CancerHelp UK helpful.

For more information about chemotherapy in general, look in the 'chemotherapy' section of CancerHelp UK.

Controlling the symptoms of kidney cancer

If you have advanced kidney cancer it may not be possible to cure it. Advanced kidney cancer means the cancer has spread beyond the kidney or has come back after treatment.

Even if your cancer can't be cured, there is treatment available to control your symptoms. This treatment may also shrink the cancer and slow it down. Biological therapy, radiotherapy, chemotherapy, surgery, embolisation and hormone therapy tablets called medroxyprogesterone can all be used to treat advanced kidney cancer. The National Institute of Health and Clinical Excellence (NICE) guidelines say that a biological therapy, such as interferon, should be available to anyone with advanced kidney cancer.

Choosing your treatment

Which treatment is best for you depends on your individual situation. You and your doctor will take the final decisions together after discussing all the options. It can be difficult to decide which treatment to try, or whether to have treatment at all. You may want to think about your quality of life while you are having the treatment. Most importantly, you will need to understand what can be achieved with the treatment you are being offered.

Other ways of controlling symptoms

There are medicines available to treat most symptoms such as pain, sickness, diarrhoea and constipation. Some people find complementary therapies such as massage and relaxation may help too.

Follow up for kidney cancer

After your treatment has finished, your doctor will want you to have regular check ups. This is to make sure you are recovering well from your treatment and to check for any sign of the cancer coming back.



If you have advanced cancer, your follow up appointments will be to make sure you are as well as possible, and to keep an eye on your progress. Your doctor will discuss any symptoms you have and suggest treatment to help control them. They can also check whether you need more treatment to control your cancer.

How often are check ups?

If you've had surgery, your first appointment is usually 4 to 6 weeks after you go home from hospital. If the risk of your cancer returning is thought to be low, you may only need follow up for 5 years. If your risk of cancer returning is higher you'll probably have regular CT scans for the first 3 years. If all is well after 3 years, you might then just have 6 monthly X-rays. But this follow up may continue for life.

If you are worried or notice any new symptoms between appointments, let your doctor know as soon as possible.

Your feelings

Many people find their checkups bring back all the worry about having cancer. It may help to tell someone close to you how you are feeling. It is quite common nowadays to have counselling after cancer treatment. Look in the 'coping with cancer' section of CancerHelp UK for more about counselling.

Kidney cancer research

All treatments must be fully researched before they can be adopted as standard treatment for everyone. This is so that we can be sure they work better than the treatments we already use. And so we know that they are safe.

First of all, treatments are developed and tested in laboratories. Only after we know

that they are likely to be safe to test are they tested in people, in clinical trials. There is research into different ways of removing kidney cancers, biological therapies and chemotherapy.

Questions for your doctor about kidney cancer treatment

- What can you tell me about the stage of my cancer?
- How do you tell the stage of the cancer?
- How likely is it that my cancer will come back after treatment?
- How likely is it that my cancer will have spread?
- What type of treatment do I need?
- Is there written information you can give me about these treatments?
- Is there any choice of treatments?
- What are the risks and benefits of the treatments you are offering?
- What are the side effects?
- Is there anything I can do to reduce side effects?
- How often will I have to come to hospital for treatment?
- Is there any transport available?
- Is it possible to have help with fares?
- Can you arrange a second opinion for me?
- Are there any experimental treatments that might help?
- How often will I have to come for follow up appointments?
- What should I do if I am worried between appointments?
- Is there a counsellor I could talk things through with?



Notes

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 cancer 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

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