



Canadian
Cancer
Society

Early Stage Kidney Cancer



1 888 939-3333 | cancer.ca

We would like to thank the people who shared their personal experiences with us.

This booklet is for people with early stage kidney cancer, which is kidney cancer diagnosed at stage 1, 2 or 3. If you have stage 4 kidney cancer, visit cancer.ca or kidneycancercanada.ca for the information you need.

Endorsed by The Canadian Urological Association (CUA).



Table of contents

2	About kidney cancer
2	The kidneys and how they work
4	What is cancer?
5	What is early stage kidney cancer?
5	Types of kidney cancer
7	When someone in your family also has cancer
9	Tests you may have
9	Imaging tests
11	Biopsy
12	What grade and stage mean
14	Treatments for early stage kidney cancer
14	Surgery
21	Other ways to treat early stage kidney cancer
23	Clinical trials
24	Getting a second opinion
26	Follow-up care
27	What to expect at a follow-up visit
27	Report symptoms
28	Living well with the effects of kidney cancer
32	We're here for you

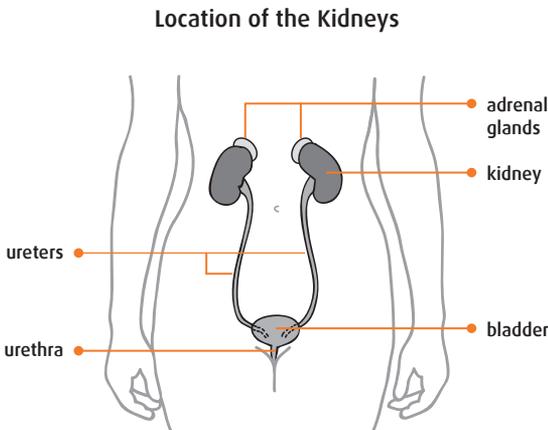
About kidney cancer

“ At first you panic and your life flashes before your eyes. I was living in a fog and wanted answers as to how to move forward and credible information about my options.

If you have stage 1, 2 or 3 kidney cancer, this booklet is for you. The information will also help you if you don't yet know if you have cancer but you're having tests or planning treatment for a tumour on your kidney. It will help you understand your treatment options and work with your healthcare team to make the decisions that are right for you.

The kidneys and how they work

The kidneys are bean-shaped organs, about the size of your fist. There are normally 2 kidneys in your body. One kidney is on each side of your spine, in the back of your abdomen, protected by your lower ribs.



Kidneys are multitaskers. Their main job is to filter water and waste from your blood. They also help control your blood pressure and help make sure your body has enough red blood cells.

Blood from your body enters your kidneys through the renal artery. Once in the kidney, your blood passes through a million tiny tubes called nephrons that remove waste and extra water to make urine. The clean blood is returned to your body through the renal vein. The urine drains from the nephrons to the renal pelvis (a hollow area in the centre of each kidney) through the collecting ducts.

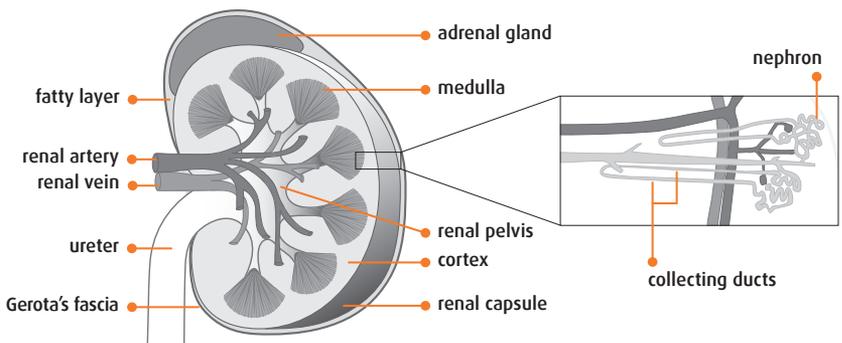
Thin tubes, called ureters, connect each kidney to your bladder. Urine passes from each kidney to your bladder through the ureters. When your bladder is full, the urine passes out of your body through another small tube called the urethra.

There is also an adrenal gland just above each kidney. The adrenal glands are part of your endocrine system, the group of glands and cells in your body that make and release hormones into your blood.

The outer layer of the kidney is called Gerota's fascia. Underneath that there is a layer of fat. The body of the kidney is called the cortex and the inner part is the medulla. The renal capsule layer surrounds the cortex, inside the layer of fat.

Kidney cancer and treatment for kidney cancer can affect how well the kidneys do their jobs. Protecting them will be an important part of the decisions you make about treatment.

Cross-section of the Kidney



What is cancer?

Cancer is a disease that starts in our cells. Our bodies are made up of trillions of cells grouped together to form tissues and organs such as muscles, bones, the lungs and the liver. Genes inside each cell tell it when to grow, work, divide and die. Normally, our cells follow these instructions and we stay healthy.

But sometimes the cells grow and divide out of control and crowd out normal cells. After a while, a group of abnormal cells forms a lump (called a tumour).

Tumours can be either non-cancerous (benign) or cancerous (malignant). Non-cancerous tumour cells stay in one place in the body and are not usually life-threatening. Cancerous tumour cells can grow into nearby tissues and spread to other parts of the body. It's important to find and treat cancerous tumours as early as possible. In most cases, finding cancer early increases the chances of successful treatment.

When cancer spreads to other parts of the body, it is called metastasis. Often, the first sign that a tumour has spread (metastasized) is swelling of nearby lymph nodes, but cancer can spread to almost any part of the body.

Cancers are named after the part of the body where they start. For example, kidney cancer starts in the cells of the kidney. Kidney cancer that spreads to the lung is called kidney cancer with lung metastases.

What is early stage kidney cancer?

Early stage kidney cancers are cancerous tumours that are in your kidneys or near them. Early stage kidney cancers have not spread to other parts of your body.

Your doctors may use the words local and regional when talking to you about early stage kidney cancer. **Local** means that the cancer is only in the kidney. **Regional** means close to the kidney or around it.



I was relieved that the cancer was not advanced and hopeful that treatment would be successful. But a cancer diagnosis is a cancer diagnosis – life changing no matter what the treatment or outcome.

Types of kidney cancer

The most common type of kidney cancer starts in the cells that line the nephrons of the kidney. It is called **renal cell carcinoma** or **RCC**. RCC is found most often in the tissue in the body of the kidney (the cortex).

Kidney cancers that start in the renal cells

RCC breaks down into subtypes. They are grouped by how they look under the microscope:

Clear cell, or conventional, RCC is the most common type of RCC. The cancer cells in these tumours are round and the fluid inside is clear.

Papillary RCC is the second most common type of RCC. The cancer cells in these tumours are shaped like little fingers. Papillary RCC is further divided into 2 types. Type 1 usually grows slowly. Type 2 can spread more quickly.

Chromophobe RCC has large, pale brown cancer cells that look like layers of bricks in a wall.

Clear cell papillary RCC has features of both clear cell and papillary RCCs but acts differently than either one. Usually only one clear cell papillary RCC develops in a kidney.

Multilocular cystic RCC tumours are made up of many different cysts with thin walls. These cysts are covered by a capsule that separates the tumour from the surrounding normal kidney tissue.

Collecting duct RCC starts in the collecting ducts at the ends of the nephron tubules in the inner tissues of the kidney (medulla). It is sometimes also called Bellini duct carcinoma.

Unclassified RCCs are tumours that do not fit into any of the other groups of RCC. These cancer cells look different under the microscope from any other type of RCC.

Kidney cancers that do not start in the renal cells

Cancerous tumours sometimes develop in different parts of the kidney, such as the blood vessels or the renal pelvis.

Visit cancer.ca or kidneycancercanada.ca to find out more about these rare types of kidney cancer.

Kidney tumours that are not cancer

Oncocytoma and angiomyolipoma are types of kidney tumours that are not cancer. These types of tumours usually aren't diagnosed until they are removed by surgery and then looked at under a microscope.

When someone in your family also has cancer

Cancer is caused by changes to genes. Most of the time, the changes to our genes that lead to cancer happen just because we get older or because we've been around something that causes cancer. So when someone else in your family is also diagnosed with cancer, it's usually due to chance or because you've both been around the same cancer risk, such as tobacco smoke.

Have you inherited a genetic condition?

It is possible to inherit genes that cause cancer from a parent, but it is rare. A strong family history of cancer can be a sign that you have an inherited genetic condition that increases your risk of cancer. A strong family history of cancer means that you have one or more close relatives, such as a parent, brother, sister or child, who have had the same type of cancer or a related cancer. Having an inherited genetic condition means that the changed gene was passed to you from your parent – you were born with it. An inherited genetic condition can also be called a genetic or hereditary disorder.

A blood test can tell your doctor if there is an inherited condition in your genes that can cause kidney cancer. These tests are called genetic tests and they take place at clinics that also provide counselling and information.

Let your doctor know if any of your close relatives has had kidney or any other type of cancer. Your doctor will help you decide if you or another member of your family should see a genetic counsellor about testing. Your doctor may refer you to a genetic counsellor if you:

- have a strong family history of cancer
- have tumours in both kidneys or more than one tumour in one kidney
- have a different cancer at the same time as your kidney cancer

- have a rare type of kidney cancer
- are less than 45 years old when cancer is diagnosed

Visit kidneycancercanada.ca/id to learn more about specific inherited genetic conditions.

What genetic test results mean

If the results from your test are positive, it means you have an inherited condition that causes kidney cancer, or one changed gene. You and your doctor will need to talk about the best treatment and follow-up care options for you.

Your doctor may want to test and monitor other people in your family too. A positive test for someone in your family means they have a higher risk of getting cancer than people without the changed gene. It doesn't mean they will definitely get kidney cancer, but they should be watched closely. Children are not usually tested for genetic conditions until they are 18 years old, but they would be watched closely by their doctors.

You might be afraid to share the result of your genetic test with your family or be worried about how taking the test affects your insurance coverage. Your genetic counsellor will discuss all of your options with you.

If you had a genetic test more than 10 years ago and the result was negative, talk to your doctor about whether you should be tested again.



Kidney cancer was always a part of my family, so the counselling was just a confirmation of what I always suspected. However, it adds a new perspective for my children – balancing when they get tested vs insurance concerns. It also strengthens the desire to carpe diem and truly cherish everything we have.

Tests you may have

Tests help to confirm a kidney cancer diagnosis and find out the type of kidney cancer you have. They also help plan your treatment because they tell your doctors important information about the cancer. If you're not sure why your doctor wants you to have a certain test, ask. Find out what the test will tell the doctor and why it's important for you to have it.



I was willing to have any test or imaging that would help in a thorough diagnosis, which would then hopefully lead to the best treatment option.

Imaging tests

Imaging tests allow your tissues, organs and bones to be looked at in more detail. These tests give your doctors a picture of the tumour so they can see the size and if it has spread. These tests are usually painless and do not require an anesthetic (freezing).

Ultrasound uses high-frequency sound waves to make pictures of organs and structures in the body. It is used to look for any changes to the kidney. Ultrasound images can show the difference between simple kidney cysts that are harmless and complex cysts or tumours that may need treatment.

Ultrasound is a fast and painless test and uses no radiation to make the images of your body. During the test you will need to hold your breath for 20 seconds at a time while some of the images are taken.

A **CT scan** uses special x-ray equipment to make 3-D and cross-sectional images of organs, tissues, bones and blood vessels inside the body. During a CT scan, you lie on a table and the table moves through a scanner that is hollow in the middle, like a donut. A computer turns the images from the scan into detailed pictures.

A CT scan offers more detail about kidney tumours than an ultrasound. It only takes a few minutes. This imaging test exposes you to low levels of radiation. Right before the CT scan, the doctor may put a substance called a contrast dye into your body to help make the pictures clearer.

MRI uses powerful magnetic forces and radiofrequency waves to make cross-sectional images of organs, tissues, bones and blood vessels. A computer turns the images into 3-D pictures.

You may have an MRI if your doctor needs more information or different information about the kidney tumour after you've already had an ultrasound or CT scan. It can also be used to check if cancer has spread to your kidney's major blood vessels or to other organs.

An MRI is a safe test and does not use the same radiation as a CT scan to make a picture of your body. But it is a longer test (30 to 60 minutes in total) and when you're getting the test you will need to hold your breath for 20 seconds at a time while the images are taken. You will be inside the MRI machine during the imaging. If you are scared of spaces that are closed in, you should talk to your doctor before this test.

An MRI may not be available in all hospitals across Canada.

Biopsy

A biopsy is a test that removes tissues or cells from a tumour and tests them in a lab. The report from the lab will tell your doctor if there are cancer cells in the sample. If there are cancer cells, a biopsy can also tell your doctor a lot about the cancer. This helps you and your doctor plan the best treatment for you.

Early stage kidney cancer is often diagnosed using only an imaging test. But to confirm your diagnosis, your doctor may send you for a biopsy after an imaging test shows a tumour. During a kidney biopsy, you lie on your stomach or on your side so doctors can easily reach the kidney. Most people have a local anesthetic to freeze the area during a biopsy. You may also have a mild sedative to make you relaxed and comfortable. Using an ultrasound or a CT scan as a guide, the doctor pushes a needle through the back and into the kidney. The doctor will remove several samples from the kidney and the tumour.

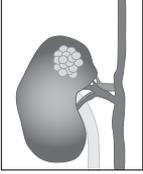
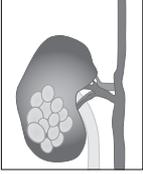
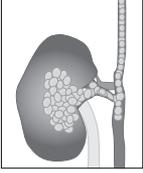
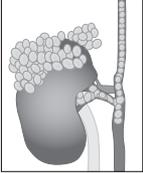
If you have surgery to remove the tumour in your kidney, a biopsy can be done on the tissue that was taken out. Your doctor will use the information from the biopsy to help decide if you need more treatment after your surgery.

What grade and stage mean

Once a diagnosis of cancer has been made, the cancer is given a grade and a stage. This information helps you and your doctor choose the best treatment for you.

Grade describes how the cancer cells look and behave compared to normal cells. Kidney cancer can be given a grade from 1 to 4. The lower the number, the lower the grade. Knowing the grade gives your healthcare team an idea of how quickly the cancer may be growing and how likely it is to spread. Lower grade cancer cells tend to be slow growing and are less likely to spread.

Stage describes the tumour size and if it has spread. For kidney cancer, there are 4 stages. Each stage is given a number from 1 to 4. Generally, the higher the number, the more the cancer has spread. Early stage kidney cancer is stages 1, 2 and 3. Stage 4 kidney cancer is not early stage kidney cancer.

Stage		Description
1		The tumour is found only in the kidney and is 7 cm or smaller.
2		The tumour is found only in the kidney and is larger than 7 cm.
3		<p>The tumour has spread outside the kidney but not beyond the fibrous tissue surrounding the kidney (called Gerota's fascia). The tumour may be found in the main blood vessels close to the kidney, the layer of fatty tissue around the kidney or the adrenal gland.</p> <p>OR</p> <p>The tumour has spread to 1 nearby lymph node.</p>
4		The tumour has spread beyond the fibrous tissue surrounding the kidney or to 2 or more lymph nodes or to other parts of the body, such as the lungs or the brain.

This table summarizes the stages of kidney cancer according to the TNM classification system used by the Union for International Cancer Control (UICC).

Treatments for early stage kidney cancer

There are many good treatments for early stage kidney cancer. Your doctors will work with you to create a treatment plan based on:

- your needs
- the type, stage and grade of your kidney cancer
- how well your kidneys are working
- your age
- your overall health

Take the time to talk to your doctor about the treatment being recommended and what the benefits and risks of the treatment mean for you. Don't rush your decision. Make sure you understand your options. Your doctor is there to help if you have questions or concerns.

Surgery

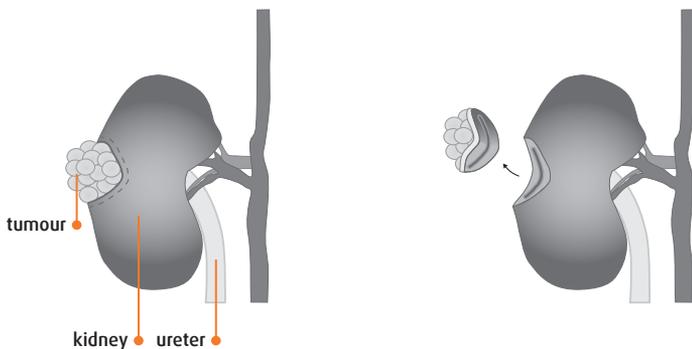
Most people with early stage kidney cancer have surgery to remove part or all of the kidney. This surgery is called a nephrectomy. The type of nephrectomy depends on the size of the tumour and stage of the kidney cancer.

Partial nephrectomy removes just the kidney tumour and some healthy tissue around it. This surgery leaves the rest of your kidney in place. Doctors use a partial nephrectomy to keep your kidney working as normally as possible and to maintain your health and quality of life after treatment. A partial nephrectomy is sometimes called nephron-sparing surgery or kidney-sparing surgery.

This surgery is most often used to treat stage 1 or 2 kidney cancer. Or your doctor may recommend it as a treatment option if you are young or have a higher risk of developing kidney problems after surgery. You may have a higher risk for kidney problems if you have only one kidney, diabetes, high blood pressure, kidney cancer that is caused by an inherited condition or a kidney disease.

If you have an inherited condition that makes it likely that more than one tumour will grow in both kidneys over time, a partial nephrectomy can remove the tumours and keep your kidneys working as well as possible.

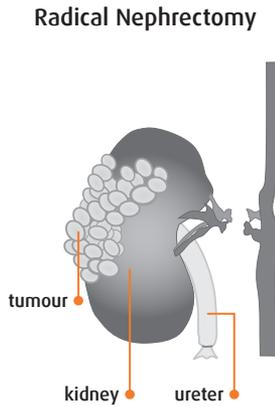
Partial Nephrectomy



Radical nephrectomy removes your whole kidney, the ureter attached to the kidney and the layer of fat around the kidney. The adrenal gland is often removed as well.

Radical nephrectomies aren't used as often as they were in the past because doctors prefer to save as much healthy kidney as possible. There is also a higher risk of developing life-long kidney problems and related heart disease after a radical nephrectomy. But sometimes they are necessary. For some stage 3 kidney tumours or tumours that are hard to reach, this surgery is still best at removing the cancer so it doesn't come back (recur).

“ They hoped to do partial nephrectomy. But when they went in they felt the placement of the tumour called for all of the kidney to come out.



Lymph node dissection removes lymph nodes, which are small, bean-shaped organs that are part of your lymphatic system. The lymphatic system helps your body fight infections. Sometimes cancer cells can be carried from the lymph nodes to other parts of your body through the lymphatic system.

Your doctor may suggest removing the lymph nodes around your kidney in order to:

- check for cancer in your lymph nodes
- remove lymph nodes that may contain cancer
- reduce the risk that your cancer will come back
- help plan further treatment

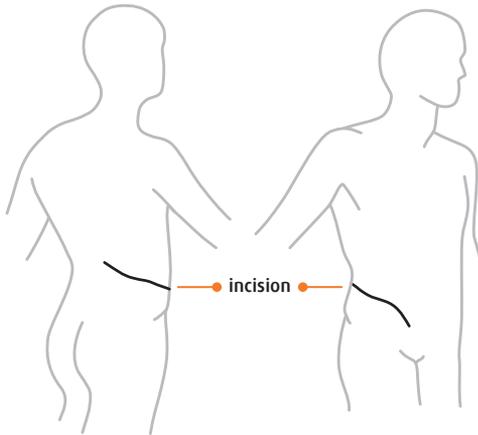
If the results from your lymph node test are negative, it means there are no cancer cells in your lymph nodes. A positive result means there are cancer cells. If you have a positive result, your doctor will use the test result to help decide on any more tests, treatments and follow-up care you may need.

Different ways to have surgery

Partial and radical nephrectomies can be done in different ways. The type of surgery you have depends on the size of the tumour and where it is, the doctor doing the surgery and what tools are available at your hospital.

For **open surgery**, the doctor makes a large surgical cut (called an incision) to reach your kidney. The cut is usually between your lower ribs in your back.

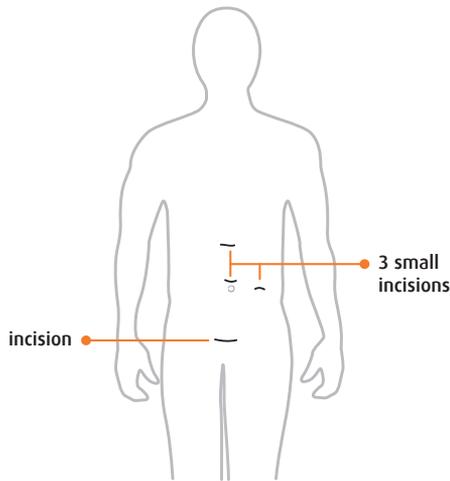
Open Surgery



Open surgery can mean more pain and side effects after surgery. It also takes longer to recover from open surgery. It is used for tumours that are very large or bulky and that have grown into the renal vein, into the main vein leading to your heart or beyond the kidney. Your doctor may also suggest open surgery if you have lung disease or if there is bleeding from your kidney.

For **laparoscopic surgery**, the doctor makes small cuts to place a laparoscope (a thin tube with a light and camera) and other tools in the abdomen. The doctor uses the laparoscope and other tools to examine the kidney and surrounding area and to remove the tumour and part or all of the kidney.

Laparoscopic Surgery



Laparoscopic surgery is also called minimally invasive surgery or keyhole surgery. Most doctors are now trained to do this surgery, and most hospitals have the equipment needed.

The operation time is usually shorter with laparoscopic surgery. People who have laparoscopic surgery also tend to have less bleeding during surgery, less pain and scarring, and a shorter hospital stay after surgery.

Both open and laparoscopic ways of doing surgery are equally good at treating early stage kidney cancer so it doesn't come back. Your doctor will help you decide which way is the best surgery for you.

Robotic surgery for kidney cancer is a type of laparoscopic surgery. In robotic surgery, the doctor removes tissue while sitting at a computer station close to the operating table. At the computer station there is a monitor with live video and the doctor uses controls to move 2 or 3 robotic arms that are connected to surgical tools.

The tools used in robotic surgery are very advanced. They can twist and turn as if they were a person's hand and wrist and fit into very small spaces. Like a standard laparoscopic surgery, the laparoscope used in robotic surgery also has a special high-definition camera that gives doctors a magnified 3-D view of the area they are operating on. Robotic surgery can help doctors more accurately remove tissue, dissect cancerous tissue from surrounding tissue, and stitch (suture) tissue together more easily than a standard laparoscopy.

One drawback of robotic surgery is that doctors can't feel the structures that they are operating on. They have to operate using information from what they see rather than what they see and feel.

Robotic surgery is only available in a few treatment centres in Canada. It may also be called robot-assisted laparoscopic surgery or computer-assisted surgery.

Other ways to treat early stage kidney cancer

Surgery is the most common treatment for early stage kidney cancer, but based on your situation, your doctor may suggest other treatments for you.

Active surveillance

Your doctor may suggest an approach called active surveillance. Some doctors call it watchful waiting. It means that you will wait for the tumour to grow or cause problems before having any treatment. You will visit your doctor regularly and your doctor will watch your kidney tumour closely with imaging tests.

The idea of having cancer but not treating it right away might sound like a bad idea to you. But studies have shown that active surveillance can be a good and safe option if you have a slow-growing, early stage kidney cancer smaller than 4 cm. Active surveillance may also be the right choice for you if you're older and have a different serious health problem or are not healthy enough for surgery right now. In these cases, you may want to delay treatment and the risks of treatment until you really need it.

“ I have been on active surveillance for 6 years. My urologist keeps a close watch with regular checkups. It is not an easy decision and second-guessing yourself happens often at first. But my surgery was not going to be an easy one and had the possibility of serious side effects. So active surveillance was the right choice for me.

Your doctor may also suggest active surveillance if you have an inherited genetic condition that causes more than one small tumour to grow in both kidneys, so that you don't have to have repeated surgeries to remove them.

Talk to your doctor about any concerns you have with this treatment. It is your choice to have active surveillance or another recommended treatment for your type of kidney cancer.

Ablation

Ablation therapies use heat or cold to kill the kidney cancer cells while saving the healthy tissue so your kidney still works as well as possible. Ablation therapies work best on tumours that are smaller than 3 cm.

Ablation therapies aren't used as often as surgery for kidney cancer, but they are good treatment options for some people. Your doctor may suggest this treatment if you are not well enough to have surgery, if you only have one working kidney or if you have an inherited genetic condition that causes more than one tumour to grow on one or both kidneys.

After an ablation treatment is done, a CT scan is used to see if the tumours have shrunk or if you need more treatment.

Ablation therapy for kidney cancer can be done 2 ways:

Radiofrequency ablation (RFA) is the type of ablation therapy most often used for kidney cancer. During RFA, a high-frequency electrical current is put right into the tumour by a thin needle. The high heat from the electricity kills all the cancer cells.

An anesthetic (freezing) may be used during RFA. The thin needle is guided by an ultrasound or a CT scan.

Cryoablation kills cancer cells by freezing them. It is also called cryosurgery, cryosurgical ablation or cryotherapy. Cryoablation uses a thin metal tube to put a very cold liquid or gas on the kidney tumour and around it. The area is allowed to thaw and then is frozen again. This freeze-thaw cycle may be repeated a few times. An ultrasound may be used to guide the metal cryoablation tube.

Cryoablation works best for small kidney tumours. It is also best for tumours deep inside the kidney because it causes less damage to the surrounding healthy tissue than RFA.

Clinical trials

Your doctor may ask you if you would like to join a clinical trial. Clinical trials compare standard treatments for diseases, which are the treatments being used right now, with newer ones. The new treatments are often very similar to the standard treatments but with some changes. Researchers study the changes to see if the new treatment will cure the disease in more people, control the disease longer or cause fewer side effects.

Clinical trials for early stage kidney cancer may include studies on active surveillance, different types of surgery, methods for radiation and ablation therapies or drug treatments given alongside the standard treatment to make sure the cancer doesn't come back.



I took part in a clinical trial to benefit my children, extended family and all cancer patients. All the clinical staff have been extremely appreciative of my participation, and it's amazing to see the researchers dedicate their lives to your disease. We are truly grateful for each other.

They are carefully designed to have as few risks and as many benefits as possible for everyone who takes part. Being part of the trial may help you – and it may help others. But you may also have side effects from the treatment being tested, or you may need to travel some distance in order to be part of the trial. If you are thinking about a clinical trial, be sure to talk to your doctor about all the possible benefits and risks.

It's your choice

If your doctor asks you about joining a clinical trial, you can be sure that the trial has strict rules to protect your health, safety and privacy. But taking part in one is up to you.

If you decide not to take part in a clinical trial or if you decide to leave the trial that you joined, you will continue to receive the best known treatment available. Your choice will not affect how your doctors care for you.

If your doctor doesn't suggest a clinical trial but you would like to know more about them, ask. You can visit kidneycancer canada.ca/trials for a list of all kidney cancer clinical trials in Canada.

Getting a second opinion

After cancer is diagnosed your doctor will talk to you about treatment options. But sometimes your local hospital might not have all the treatments available for early stage kidney cancer or your doctor might not be an expert in all the treatment types. Or maybe you just have a lot of questions and are very uncertain about the decisions you need to make. If so, you may want to be referred to another doctor to get their point of view. This is called a second opinion.

“ I looked for a new urologist after first learning of my small tumour. My doctor would not answer my questions. It was the best decision I could have made. If you feel that you should get a second opinion, don't wait.

Some people find it hard to tell a doctor that they'd like to find out what another doctor thinks. Getting a second opinion is more common than you might think. Most doctors are comfortable with referring you to another doctor and may even suggest it themselves. Diagnosing cancer and planning treatment isn't always straightforward. Having more than one doctor review your diagnosis can help plan the best and most kidney-sparing treatment for you. Hearing what another doctor says may help you feel better and more confident about your treatment.

You may not know it, but your doctor may have reviewed your tests and history with another doctor before making treatment recommendations for you. Ask your doctor if your case has been reviewed by other specialists and what their feedback was.

If you're thinking about getting a second opinion

- Be honest. Tell your doctor that you would like to find out what another doctor recommends before you decide on treatment.
- Ask for a copy of your medical records, test results or even biopsy samples that will help the second doctor make a diagnosis.
- Ask your doctor to refer you to someone who sees many cases of early stage kidney cancer each year. If needed, your doctor can find out about hospitals with these experts at kidneycancer canada.ca/so.

Follow-up care

Follow-up care is an important part of cancer care. It helps you and your doctors monitor how you are progressing and recovering from treatment. At first, your follow-up care may be managed by the doctor who looked after your treatment. Later on, it may be managed by your family doctor.

The chance of kidney cancer coming back is greatest within 3 years, so you'll have more follow-up visits during this time. Sometimes, kidney cancer can come back a long time after treatment is finished. So it's important to keep seeing your doctor regularly.

Follow-up visits are usually scheduled:

- 4 to 6 weeks after surgery
- every 6 months for the first 3 years
- then once a year for the next 3 years (until 6 years after the end of treatment)

Your doctors will plan the timing of your follow-up visits based on your needs and the guidelines set by the Canadian Urological Association. Visit kidneycancercanada.ca/guidelines to learn more about follow-up guidelines.

What to expect at a follow-up visit

During a follow-up visit, your doctor will usually ask questions about the side effects of treatment and how you're coping. They may also ask about your diet and lifestyle.

Your doctor may do a physical exam and feel your abdomen, side and lower back. Your doctor will also check your surgical scar to see how well it is healing or if there are any changes to it. Tests are often also part of follow-up care. You may have kidney function tests as well as imaging tests to look for any changes or a new cancer in the organs in your abdomen, including the liver.

Report symptoms

Don't wait until your next scheduled appointment to report any new symptoms and symptoms that don't go away. Tell your doctors if you have:

- headaches
- changes in your memory or reasoning
- a cough that won't go away

If kidney cancer comes back, your doctors are there to help you – just as they were the first time.

Living well with the effects of kidney cancer

“ It was vital for me to prove that you can live a normal life even after kidney cancer. With the approval of my surgeon, I returned to work, started exercising again and still went on a ski trip during spring break. When I was diagnosed we had just reserved a family trip for the summer holidays. My husband wanted to cancel all holiday plans. But we went and we enjoyed great moments as a family!

Do I need to change what I eat and drink?

Maybe. If you've had part of a kidney or a whole kidney removed, the kidney you have left can still do what your body needs it to do. But you will need to treat it well. A kidney that has to work too hard can lead to kidney failure and then to heart problems.

A healthy diet will help your kidney work well. It will also help you maintain strength, energy and overall good health. Talk to your doctor or a registered dietitian about whether you need to make some changes to your diet. They may suggest that you:

Eat less protein. A diet that is high in protein requires kidneys to work harder to get rid of waste from your blood.

Skip the salt. Too much salt makes your kidneys work too hard.

Limit how much phosphorus you eat. When your kidneys aren't working very well, the phosphorus levels in your blood may go up. This can cause problems like joint pain. The answer may be to limit foods that are high in phosphorus, such as seeds, nuts and beans, as well as foods containing moderate amounts of phosphorus, such as milk, cheese, meat, fish and poultry.

Drink less alcohol. Alcohol can damage your kidneys. Keep to less than 2 drinks a day for men and less than 1 drink a day for women.

Watch how much liquid you take in. Staying well-hydrated is important, but extra fluids can strain your kidney function.

What about my feelings?

There's no right or wrong way to feel about having cancer. It's normal to feel sad, mad, confused or lonely. You might feel hopeful one moment and out of control the next. Many people continue to go through a range of emotions after treatment is over. Some people are really excited when they think about their future while others are still very worried about what the future will bring.

Everyone is different in how they cope. Many people find that learning about cancer helps them with visits to their doctor and treatment. While it can be hard to sleep well when you're worried, do what you can to rest. When you're tired, everything seems worse. Look after yourself by finding relaxing, enjoyable activities that refresh you mentally, spiritually or physically.

It may help to talk about your feelings with someone you trust. Some people like to talk to friends or loved ones. Others prefer talking to someone who has had a similar cancer experience. You may visit a support group or talk with a survivor in person, over the phone or online. Your doctor can also refer you to specialists and counsellors who can help. It's OK to ask for help if you need it.

“ I needed help dealing with the emotional side of cancer. It's the first thing I tell people when they tell me they have cancer. I tell them to find someone they can talk honestly with. Someone they can lose it with who won't take it personally.

The Canadian Cancer Society's booklet *Living with Cancer* has more information on feelings, support and other topics.

What can I do to stop cancer from coming back?

No one can guarantee that the cancer won't come back. But rather than focusing on what you can't control, try to improve what you can. You may be able to make changes that will reduce your risk of cancer or help you live better. Talk to your doctor about your lifestyle. Together you can come up with a plan that you understand and that you can start to follow. Some survivors call this their wellness plan.

The Canadian Cancer Society's booklet *Life after Cancer Treatment* has more information on wellness plans and other survivorship topics.

Survivors of kidney cancer can focus on living tobacco-free. Smoking is the strongest risk factor for developing kidney cancer. It also increases the risk that kidney cancer will come back. If you smoke, get help to quit. This will reduce your risk of cancer coming back and will also reduce strain on your heart.

You can also focus on being active every day. Exercising regularly after a cancer diagnosis may help lower the risk of cancer coming back. Exercise also helps your one kidney or partial kidney do its job.

Kidney Cancer Canada's booklet *Get Active, Sit Less* has more information on exercise for kidney cancer survivors.

Will I need dialysis?

You will only need dialysis to remove waste from the blood if your remaining kidney or partial kidney does not work well or if both kidneys have been removed. If you need dialysis, it may be for a short time or a long time.

Will I need a kidney transplant?

It's possible, but not very likely. Someone with kidney cancer may have both kidneys removed if the normal portions of the kidney cannot be saved, but this is rare. If you have both kidneys removed, you will likely need dialysis for the rest of your life. You may be able to have a kidney transplant through organ donation or a family member donating a kidney. You must be free from cancer for 2 years after treatment for kidney cancer before you can be considered for a kidney transplant.

We're here for you

The Canadian Cancer Society and Kidney Cancer Canada have worked together to create this booklet for you about early stage kidney cancer. Contact either organization - or both - when you have questions about treatment, diagnosis, care or services.



Canadian Cancer Society

1-888-939-3333

TTY 1-866-786-3934

info@cancer.ca

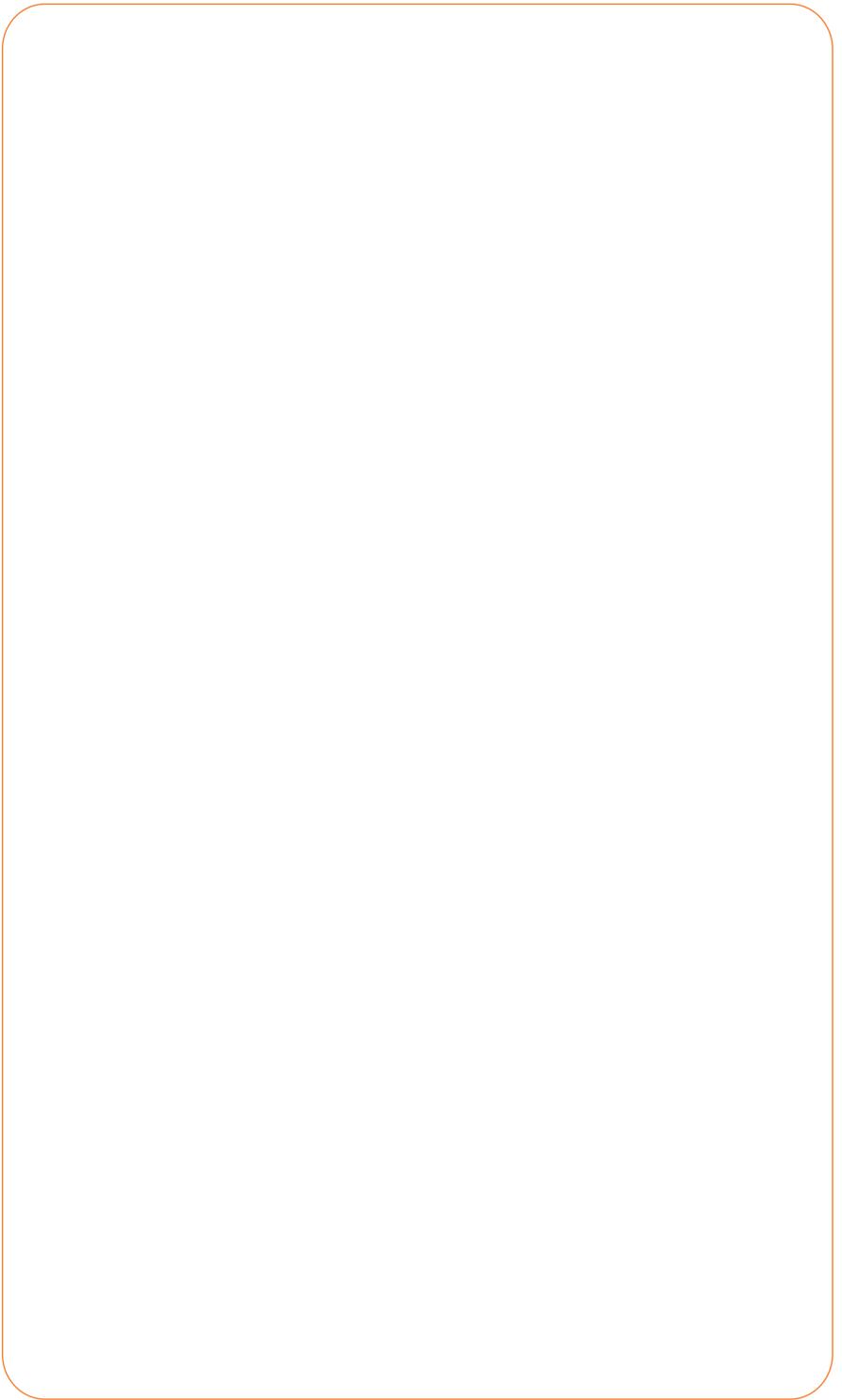
cancer.ca

Kidney Cancer Canada

1-866-598-7166

info@KidneyCancerCanada.ca

KidneyCancerCanada.ca



What we do

The Canadian Cancer Society fights cancer by:

- doing everything we can to prevent cancer
- funding research to outsmart cancer
- empowering, informing and supporting Canadians living with cancer
- advocating for public policies to improve the health of Canadians
- rallying Canadians to get involved in the fight against cancer

Contact us for up-to-date information about cancer and our services or to make a donation.



Canadian
Cancer
Society

1 888 939-3333
cancer.ca

Developed in partnership with



Kidney
Cancer
CANADA

1 866 598-7166
KidneyCancerCanada.ca

This is general information developed by the Canadian Cancer Society.
It is not intended to replace the advice of a qualified healthcare provider.

The material in this publication may be copied or reproduced without permission; however, the following citation must be used: *Early Stage Kidney Cancer*. Canadian Cancer Society 2017.