

Quality of Life after Minimally Invasive Kidney Cancer Surgery

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Surgery is the removal of the tumor and some surrounding healthy tissue during an operation. If the cancer has not spread beyond the kidneys, surgery to remove the tumor may be the only treatment needed. Surgery to remove the tumor may mean removing part or all of the kidney, as well as possibly nearby tissue and lymph nodes. Depending on the stage and location of the cancer and other factors, surgery might be done to remove the entire kidney including the tumor (known as a radical nephrectomy) or the cancer alone along with some of the surrounding kidney tissue (known as a partial nephrectomy). Sometimes, the adrenal gland (the small organ that sits on top of each kidney) and fatty tissue around the kidney is removed as well. In certain cases, the nearby lymph nodes might also be removed.

Some people whose cancer has spread to other organs may benefit from surgery that takes out the kidney tumor. Removing the kidney might also lessen symptoms such as pain and bleeding.

Types of surgery used for kidney cancer

- **Radical nephrectomy:** Surgery to remove the tumor, the entire kidney, and surrounding tissue is called a radical nephrectomy. If nearby tissue and surrounding lymph nodes are also affected by the disease, a radical nephrectomy and lymph node dissection is performed. During a lymph node dissection, the lymph nodes affected by the cancer are removed. If the cancer has spread to the adrenal gland or nearby blood vessels, the surgeon may remove the adrenal gland during a procedure called an adrenalectomy, as well as parts of the blood vessels.
- **Partial nephrectomy:** A partial nephrectomy is the surgical removal of the tumor. This type of surgery preserves kidney function and lowers the risk of developing chronic kidney disease after surgery. Research has shown that partial nephrectomy is effective for T1 tumors whenever surgery is possible. Newer approaches that use a smaller surgical incision, or cut, are associated with fewer side effects and a faster recovery.
- **Laparoscopic and robotic surgery:** During laparoscopic surgery, the surgeon makes several small cuts in the abdomen, rather than the one larger cut used during a traditional surgical procedure. Laparoscopic and robotic approaches require specialized training. It is important to discuss the potential benefits and risks of these types of surgery with your surgical team and to be certain that the team has experience with the procedure.

Non-surgical tumor treatments

Sometimes surgery is not recommended because of characteristics of the tumor or the patient's overall health. Every patient should have a thorough conversation with their doctor about their diagnosis and risk factors to see if these treatments are appropriate and safe for them.

The following procedures may be recommended:

- **Radiofrequency ablation:** Radiofrequency ablation (RFA) is the use of a needle inserted into the tumor to destroy the cancer with an electrical current. The procedure is performed by an interventional radiologist or urologist. The patient is sedated and given local anesthesia to numb the area. In the past, RFA has only been used for people who were too sick to have surgery. Today, most of these patients are monitored with active surveillance (see above).
- **Cryoablation:** It is also called cryotherapy or cryosurgery, is the freezing of cancer cells with a metal probe inserted through a small incision. The procedure requires general anesthesia for several hours and is performed by an interventional radiologist. Some surgeons combine this technique with laparoscopy to treat the tumor, but there is not much long-term research evidence to prove that it is effective.

Monitoring Kidney Function

Most people will perform well with just one urinary organ or with one whole urinary organ and a part of the second. You will probably have checkups to watch the subsequent factors associated with urinary organ perform.

- **Blood pressure.** You will need careful observance of your vital sign as a result of small urinary organ performs will increase vital sign and in turn, harm your urinary organ.
- **Protein pee levels.** High protein urine levels (proteinuria) might indicate urinary organ harm and poor urinary organ perform.
- **Waste filtration.** Glomerular filtration rate is a measure however expeditiously your urinary organ filters waste. The take a look at is typically performed with a sample of blood to live the creatinine level. A reduced filtration rate indicates small urinary organ perform.