Kidney Cancer Causes You Should Know About

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Kidney Cancer Causes

The American Cancer Society estimates that there will be approximately 63,340 new cases of kidney cancer in 2018 – 42,680 in men, and 22,660 in women. Kidney cancer is also one of the most prevalent types of cancers, and our lifetime risk of developing it is 1 in 48 for men, and 1 in 83 for women.

Unfortunately, these rates have been climbing since the 1990s and researchers don't know why. It could be as simple as better imaging tests, such as CT scans, which are now picking up the cancers that were not found before. Although more cancers are being found, the death rates are leveling off – they have subsequently gone down since the 1990s.

Kidney Cancer Causes and Risk Factors

It is not clear what causes kidney cancer at this time. Researchers have outlined several risk factors that may increase the likelihood of developing it, however.

For example, smoking, obesity, hypertension, and a family history of kidney cancer all can increase your risk of developing kidney cancer. As we noticed in the statistics, men are more likely than women to have kidney cancer. In addition, African Americans and American Indians/Alaska Natives have a slightly higher risk of developing kidney cancer than white people.

Other disease-specific risk factors include workplace exposures – there are certain chemical exposures that are known to increase your likelihood of developing kidney cancer, specifically cadmium and an organic solvent called trichloroethylene.

Being prescribed phenacetin in the past can also up your chance can also up your risk – this was a pain reliever that has been off the market for over thirty years.

In addition, diuretics may increase your risk slightly. Having these hereditary conditions increases the risk of developing kidney cancer incrementally, although the American Cancer Society notes that they account for a small portion of the kidney cancer cases overall:

- Von Hippel-Lindau disease.
- Hereditary papillary renal cell carcinoma.
- Hereditary leiomyoma-renal cell carcinoma.
- Birt-Hogg Dube (BHD) syndrome.
- Familial renal cancer.
- Cowden syndrome.
- Tuberous sclerosis.
- Hereditary renal oncocytoma.

How Common Is Kidney Cancer?

Kidney cancer is the 12th most common cancer in the world according to the World Cancer Research Fund International. Renal cell carcinoma is the most common type of kidney cancer with 80 to 90 percent of cases, the remaining 10 to 20 percent are renal pelvic cancer.

Kidney Cancer Stages

When you're diagnosed with kidney cancer, your physician typically *stages* the cancer. Staging of the cancer is useful for numerous reasons. The main reason it is useful is because it lets your practitioners know if your cancer has spread, and if so, how far. These stages are universal, so anyone who knows your stage understands this information.

The American Joint Committee on Cancer (AJCC) TNM System is often used to stage cancer. The TNM system describes the size of the **Tumor (T),** whether it has spread to nearby lymph **Nodes (N),** and whether it has spread to other organs and **Metastasized (M).**

The University of California Los Angeles (UCLA) Integrated Staging System utilizes the AJCC system, but improves upon it. It takes into consideration the person's overall health, along with the Fuhrman grade of the tumor, and places people into low-, intermediate- and high-risk groups.

How Is Kidney Cancer Diagnosed?

If your physician suspects something is wrong with your kidneys, he or she will likely order the following diagnostic tests:

- Blood and urine tests. These tests may rule out other conditions, as well as give your physician clues as to what is causing your symptoms.
- Computed tomography (CT) scan or magnetic resonance imaging (MRI) will allow your physician to visualize your kidneys, possibly seeing a tumor or other abnormalities.
- If a tumor is seen on imaging, or otherwise suspected, a biopsy can remove a small sample of cells. These cells are then sent to a lab for to look for cancer.

Kidney Cancer Treatment

Treatment for kidney cancer will depend on the stage of the cancer, as well as the goals and general health of the patient.

Generally, surgery is involved – surgery removes the tumor and preserves as much kidney function as possible. There are various surgical options available:

- **Radical nephrectomy:** the entire kidney is removed, as well as neighboring tissues, lymph nodes, and the adrenal gland.
- **Partial nephrectomy:** this surgery removes as little of the kidney as possible. The tumor is removed, with a small margin of healthy kidney tissue. This surgery is preferred in tumors that are not advanced.

If the cancer is present in only the kidney, often the only treatment necessary is surgery. If the cancer has spread outside of the kidney, chemotherapy or radiation may be recommended.

There are also a number of nonsurgical treatment options available for people who are not candidates for surgery, or who have very small tumors:

- **Cryoablation:** a hollow needle is inserted into the tumor and a cold gas freezes the cancer cells.
- **Radiofrequency ablation:** a probe is inserted into the tumor and an electrical current is ran into the

probe, causing the cells to burn.

Kidney Cancer Treatment Success Rate

Physicians use the term “5-year survival rate”, which is defined by the American Cancer Society as “the percentage of people who live at least 5 years after being diagnosed with cancer.”

According to the National Cancer Data Base, the 5-year survival rates for kidney cancer, by stage, are as follows:

- Stage I: 81%
- Stage II: 74%
- Stage III: 53%
- Stage IV: 8%