Kidney Cancer

Kidney cancer is cancer that originates in the kidneys, which filter blood and remove waste. The most common type of kidney cancer in adults is renal cell carcinoma that begins in the lining of the tubes of the kidney.

Statistics

- In 2017, an estimated 63,990 new cases of kidney and renal pelvis cancers were expected be diagnosed in the U.S.
- An estimated 14,400 Americans were expected to die from the disease in 2017.
- In Texas, an estimated 5,271 new kidney and renal pelvis cancers were expected to be diagnosed in 2016, and 1,178 Texans were expected to die from the disease in 2016 alone.
- The average age of people when diagnosed with kidney cancer is 64. Kidney cancer is rare under age 45.
- Of the many types of kidney cancer, about nine out of 10 cases are diagnosed as renal cell carcinoma.
- About 3 percent of all cancers diagnosed in the U.S. each year are kidney cancers.

Risk Factors

The exact causes of kidney cancer are unknown; however some risk factors are linked to the disease.

- Obesity: Kidney cancer risk increases for people who are extremely overweight.
- Race: African Americans, Native Americans, and Alaska Natives have a slightly increased risk of kidney cancer.
- Certain medicines: Use of phenacetin, a popular non-prescription pain reliever, has been linked to renal cell carcinoma. Because it has not been available for two decades, it is no longer a major concern.
- High blood pressure: People with high blood pressure are at a higher risk of developing the disease. It is not known whether the condition or the medicine used to treat it is to blame for the increase in risk.
- **Gender:** Men are about twice as likely to develop the disease as women.
- Family history: Those with a strong family history of renal cell carcinoma are at a higher risk to develop the cancer. Brothers and sisters of those diagnosed are at the highest risk.
- Smoking: Tobacco use has a strong link to kidney cancer. Smoking raises the risk for developing kidney cancer. The risk decreases over time if tobacco use ceases.
- Kidney disease: Those with advanced kidney disease and those on dialysis have an increased risk.
- Hereditary disease: People with rare inherited conditions including Birt-Hogg-Dube syndrome, hereditary leiomyoma-renal cell carcinoma, hereditary papillary renal cell carcinoma, hereditary renal oncocytoma, familial renal cancer, tuberous sclerosis, and von Hippel-Lindau disease have an increased risk.
- Exposure to chemicals: Some research links exposure to cadmium, some herbicides, and organic solvents to an increased risk of developing kidney cancer.

Symptoms and Signs

Kidney cancer varies with each patient; some have no symptoms in the early stages. People with these symptoms should consult their physician:

- Blood in the urine
- Low blood counts (anemia)
- High blood counts
- Unexplained low back or side pain Loss of appetite
- High calcium in blood
- Unexplained weight loss
- Unexplained fever

- Fatigue
- Tumor calcification on x-ray
- Abdominal, side, or lower back mass

Tips for Prevention

Kidney cancer cannot be completely prevented. However, certain lifestyle changes, such as quitting smoking, maintaining a healthy weight, controlling high blood pressure, and reducing or all together avoiding exposure to environmental toxins, are believed to decrease the risk of developing the disease.

Treatment Options

Kidney cancer, depending on the stage, may be treated by a team of specialists including medical oncologists, radiation oncologists, and urologists. Treatment options vary widely depending on the cancer's type, stage, and the patient's overall health. Treatment options include removing part or all of the kidney, chemotherapy, immunotherapy, radiation therapy, targeted therapy, surveillance, ablation, and other local therapies. Many patients receive a combination of treatments.

Source: American Cancer Society, Kidney Cancer Association, National Cancer Institute, and Texas Cancer Registry

