

5 Things to Know About Kidney Cancer

In honor of Kidney Cancer Awareness Month, Elaine Lam, MD, FACP, talks about the latest in the diagnosis and treatment of kidney cancer.

March 15, 2022 By Greg Glasgow at the University of Colorado Cancer Center

March is Kidney Cancer Awareness Month, and to get the latest information on the disease, we spoke with [University of Colorado \(CU\) Cancer Center](#) member [Elaine Lam, MD, FACP](#), an associate professor of medicine in the Division of Medical Oncology at the [University of Colorado School of Medicine](#).

Also known as renal cell carcinoma, [kidney cancer](#) is one of the 10 most common cancers in both men and women. In the U.S. in 2022, according to the [American Cancer Society](#), there will be around 79,000 new cases of kidney cancer diagnosed, and around 13,920 people will die from the disease. In [Colorado](#), there will be an estimated 1,080 new cases of kidney cancer in 2022, and an estimated 180 people will die from the disease.

Here are five things Lam wants the community to know about kidney cancer in 2022.

1. The incidence of kidney cancer is on the rise.

While many cancers are decreasing in incidence, kidney cancer is one of the cancers where the incidence is increasing. Primarily, that's because we're doing more CT scans for other reasons and kidney cancer are found incidentally. For example, people get in a car accident and go to the ER, or have a CT scan for other reasons, and a kidney tumor is found unexpectedly. That's increasing the number of new kidney cancer cases. Additionally, smoking and obesity are associated with higher risk of developing kidney cancer, and higher rates of obesity in the population may contribute.

The link between chronic kidney disease (CKD) and kidney cancer is still being investigated. Some studies have pointed to higher cancer risk in end stage renal disease patients requiring dialysis, but it is not known whether other stages of CKD are associated with kidney cancer. Renal transplant surgeons at the University of Colorado perform most of the kidney transplants in Colorado. Sometimes patients who are undergoing preoperative evaluation for a kidney transplant are found to have incidental kidney cancers. That's a special situation where we have to deal with that, and then determine how long people have to wait after cancer surgery to get their transplant.

2. There is no standard screening for kidney cancer, but there are risk factors.

Screening tests are done to look for cancer in people who don't have symptoms of cancer. There are no routine screening imaging tests such as CT scan or ultrasound for kidney cancer. There are also no blood tumor markers for kidney cancer. When people go to their primary care doctor for an annual physical, they usually get a urinalysis, which is not specific for kidney cancer, but it's looking for blood in the urine, to see if any additional evaluations need to be done. The overall incidence of kidney cancer is still much lower than prostate, lung, colon, or breast cancer, so in terms of the number of patients you would need to screen to find those cancers, it is not very feasible to screen average risk individuals.

The common risk factors for developing kidney cancer are cigarette smoking, obesity, high blood pressure, renal disease, and family history. Inherited conditions that can lead to kidney cancer include von Hippel Lindau (VHL) disease, hereditary leiomyomatosis and renal cell carcinoma, Birt-Hogg-Dube disease, Tuberous Sclerosis Complex, and other syndromes. There are also associations between renal cell carcinoma and occupational exposures to chemicals like benzene or herbicides. It can be hard to prove an association because oftentimes there can be a lag time of 20-30 years between the exposure and the development of kidney cancer.

3. There are symptoms to be aware of.

People with kidney cancer may not have any symptoms in the early stages of cancer. The most common symptoms of kidney cancer are blood in the urine, persistent lower back pain on one side, a mass or lump in the abdomen, tiredness, and unexplained weight loss.

If you have blood in the urine, definitely go see your doctor to get evaluated. It could just be a urinary tract infection, but blood in the urine can be due to kidney cancer or bladder cancer, and it needs to be evaluated.

Your primary care physician will do tests to see if there are other more common causes for blood in the urine, like urinary tract infection or kidney stones. But if there's no other cause, they may order imaging studies or refer you to see a urologist to evaluate for more concerning causes, including kidney cancer or bladder cancer.

4. Treatment options vary depending on how advanced the cancer is.

Early stage kidney cancers that have not metastasized elsewhere are typically treated with surgery. People undergo partial nephrectomy or radical nephrectomy — removal of part of the kidney or the whole kidney — depending on the size and location of the tumor within the kidney. After surgery, patients may also be candidates for adjuvant therapy, treatments that are given to lower the risk of the cancer coming back.

Some people get diagnosed with stage IV or metastatic kidney cancer, which means the cancer has already spread outside of the kidney to lymph nodes, lungs, bones, or brain. Patients with metastatic kidney cancer typically get systemic therapy with immunotherapy-based combinations. In certain situations of metastatic disease, patients may still get a nephrectomy in addition to systemic therapy.

5. There are new treatment options.

For patients with localized kidney cancer who have undergone surgery and have an intermediate-high or high risk of recurrence following nephrectomy, the immunotherapy drug pembrolizumab (Keytruda) was approved in November 2021 as an adjuvant treatment.

For patients with metastatic renal cell carcinoma, there are now multiple treatments that can be used to help control cancer and help patients live longer. These are usually immunotherapies that stimulate one's immune system to fight the cancer or targeted therapies that stop cancer growth by blocking blood vessel formation in the tumor.

The other really exciting thing for kidney cancer is the approval of a new drug for patients who have Von Hippel-Lindau (VHL) syndrome, an inherited disorder that appears most often in young adults and is associated with a lot of different tumors, including hemangioblastomas in the brain and spinal cord, and tumors in the kidney and pancreas. In August 2021, the FDA approved belzutifan (Welireg) for patients with VHL syndrome-associated tumors, and that's a big deal. Prior to that, patients who had these tumors had to undergo multiple surgeries or radiation treatments for tumors that keep coming back. This is a potentially life-changing drug for many patients with VHL syndrome.

New treatments for kidney cancer offer hope for many patients with kidney cancer.

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