What is Upper Tract Urothelial Carcinoma (UTUC)?

Upper Tract Urothelial Carcinoma (UTUC) is a cancer that affects the inside lining (urothelium) of the kidney (the “collecting system” – where urine starts to drain after it is made by the kidney) and the ureter (the tube that carries urine from the kidney to the bladder). It is different from bladder cancer or kidney cancer. UTUC is rare, with an estimated 7,000 new cases in the United States each year.

What Causes UTUC and Who is at Risk?

Men are two to three times more likely than women to get UTUC. It is most likely to occur in people age 70 or older. The biggest risk factor is smoking. People who have an inherited condition called Lynch syndrome are also at a higher risk. This condition predisposes people to certain types of cancer, one of which is UTUC.

What are the Symptoms of UTUC?

Many people with UTUC do not have any symptoms. They are often diagnosed when they have a urine test for another reason and the test detects blood in the urine that can only be seen under a microscope. In some cases, a person with UTUC will see blood in their urine. Less common symptoms include pain in the side. In more advanced cases, a person may notice weight loss, loss of appetite or night sweats.
What are the Types of UTUC?

- **Low-grade UTUC** is less aggressive. It is less likely to invade deeper into the kidney or to spread to other parts of the body.
- **High-grade UTUC** is more likely to invade the kidney itself or other organs. It is more likely to spread to other parts of the body.

Recurrence rates for both low-grade and high-grade cancers are high. This means the cancer is likely to return after treatment, so people with any type of UTUC should consider getting checked by their doctor often, even after treatment.

How is UTUC Diagnosed?

If a patient has side pain or blood in their urine, the doctor may order a CT scan. If the scan suggests the presence of UTUC, the doctor may confirm the diagnosis with a procedure called ureteroscopy. The doctor uses a ureteroscope, which is a long, thin tube that has an eyepiece on one end and a tiny lens and a light on the other end. The device is passed through the urethra (the tube that allows urine to leave the body) and bladder and up the ureter to look inside the kidney and ureter.

The doctor takes a sample of tissue (a biopsy) with instruments that are placed through the camera. The doctor also looks for the presence of bladder cancer, since patients with UTUC are also at a higher risk of this disease.

Some patients have a biopsy that does not involve a ureteroscope. Instead, the doctor uses a needle that is placed through the skin.

UTUC is a cancer that affects the inside lining of the kidney or the ureter, which is the tube that carries urine from the kidney to the bladder.
How is UTUC Treated?

Treatment for low-grade UTUC

If a patient has a low-grade UTUC, the doctor may treat the cancer with surgery and/or medicine:

- **Ureteroscopy**: this is a minor surgery in which a doctor uses a small camera and a laser, or electrocautery to destroy the tumor. For a larger tumor, the doctor may remove it with small instruments and cameras placed through a small incision in the patient’s side. Because UTUC often recurs, patients often have multiple ureteroscopies in the first year after they are diagnosed to see if the disease has returned.

- **Nephroureterectomy**: this surgery removes the whole kidney and ureter and a little piece of the bladder.

- **Ureterectomy**: this surgery is when just a part of the ureter may be removed and the remaining, uninvolved parts of the ureter are sewn back together.

- **Medicine**: For low-grade UTUC, there are a few medications that may be instilled in the kidney, ureter or bladder. One option is a therapy that combines chemotherapy and an innovative gel technology. It is liquid when chilled, but turns into a gel at body temperature. Unlike typical chemotherapy that goes everywhere in your body, the gel is directed to the area inside the body where the tumors are located. The gel stays in place for up to 4 to 6 hours.

Treatment for high-grade UTUC

For patients with high-grade disease, surgery and/or medicine may be used:

- **Medicine and Surgery**: one treatment option is four cycles of chemotherapy, followed by nephroureterectomy to remove the whole kidney and ureter and a little piece of the bladder. Some of the lymph nodes in the surrounding area may also be removed.

- **Medicine**: Some cases of UTUC are treated with medicine, with or without surgery. In some patients, the inside of the kidney or ureter is exposed to medicine. The treatment prevents the cancer from coming back or treats an existing tumor that may be difficult to reach with a ureteroscope.

Talk to your doctor about treatment options to learn more and decide which option is best for you.

People with any type of UTUC should consider getting checked by their doctor often, even after treatment.
About the Urology Care Foundation

The Urology Care Foundation is the world's leading urologic foundation – and the official foundation of the American Urological Association. We provide information for those actively managing their urologic health and those ready to make health changes. Our information is based on the American Urological Association resources and is reviewed by medical experts. To learn more, visit the Urology Care Foundation’s website, UrologyHealth.org/UrologicConditions or go to UrologyHealth.org/FindAUrologist to find a doctor near you.

Disclaimer

This information is not a tool for self-diagnosis or a substitute for professional medical advice. It is not to be used or relied on for that purpose. Please talk to your urologists or health care provider about your health concerns. Always talk to a health care provider before you start or stop any treatments, including medications.

For more information, visit UrologyHealth.org/Download or call 800-828-7866.

UroGen® Pharma is proud to support the Urology Care Foundation in its quest to educate patients.

Listen to our Podcast:
Upper Tract Urothelial Carcinoma (UTUC) With Dr. Aaron Potretzke

Dr. Aaron Potretzke talks about Upper Tract Urothelial Carcinoma (UTUC). The goal of this podcast is to help patients diagnosed with UTUC and their caregivers navigate their personal care and feel empowered to make informed decisions about their treatment.

Scan QR Code with phone camera for more about UTUC.