



University of Michigan
C.S. Mott Children's Hospital

Solid Tumor Oncology Program

Wilms Tumor

Wilms tumor – also known as nephroblastoma – is a kidney cancer that predominantly affects young children (under age 5). It is the most common type of renal (kidney) cancer in children and accounts for about 5 percent of all childhood cancers. While the tumor is generally only found in one kidney, it can appear in both kidneys at the same time. With early detection, the survival rate for patients with Wilms tumor is 90%.

Symptoms may include:

- Abdominal pain- may be caused from pressure on other organs near the tumor
- Abdominal swelling
- Palpable abdominal mass - a non-tender mass, or lump, felt or seen in the abdomen
- Fever
- Nausea/Vomiting
- Loss of appetite and weakness or tiredness
- Constipation
- High blood pressure (hypertension)
- Blood in the urine (hematuria)

Diagnosis

Diagnosing Wilms tumor begins with a thorough health history and performing a comprehensive physical examination. Some testing will be required and may include blood work, a urine test, an abdominal x-ray, an abdominal ultrasound, a CT scan and/or an MRI. The tumor will then be biopsied or completely excised to determine its exact pathology.

If Wilms tumor is the diagnosis, your doctor will stage the tumor, which determines if and how far the cancer has spread. Staging the tumor will help determine a treatment plan.

Treatment

Every child's treatment plan is individualized, based on the patient's needs and the specifics of the tumor.

Treatment options include:

- surgery (to remove all or part of the affected kidney and any involved structures)
- chemotherapy (to shrink the remaining tumor, or to treat metastasis and/or recurrent disease)
- radiation (to shrink the remaining tumor or to treat metastasis and/or recurrent disease)
- medications (to control pain, hypertension, nausea, and infections)
- blood pressure monitoring (essential when a kidney tumor is present)
- continuous follow-up care (to determine response to treatment, detect recurrent disease, evaluate function of remaining kidney, and manage late effects of treatment)