

## Treatment of Wilms Tumor

When a child is diagnosed with Wilms tumor the first treatment in North America is almost always surgery. Usually this procedure is the removal of the kidney and the tumor, called a nephrectomy, although occasionally a biopsy of the tumor is performed. The surgeon's goal is to remove the kidney completely without rupturing the tumor capsule. The other kidney is inspected. (7% of patients have Wilms tumor in both kidneys) as well as regional lymph nodes.

The surgeon makes a preliminary determination of the tumor stage and sends tissue samples to the pathologist who examines the tumor under a microscope. The pathologist's findings are very important in determining treatment. If some of the cancer cells are irregular or larger than normal, the tumor type (histology) is called anaplastic. Treatment must be more aggressive when these unusual cells are abundant within the tissue.

Fortunately, 95% of Wilms tumor histologies are determined to be favorable. Oncologists, the doctors who administer chemotherapy, use the findings of stage and histology to determine appropriate treatment. Most children receive two drugs, dactinomycin and vincristine. If their stage is local and histology is favorable, that is all the treatment they will receive. Doxorubicin, cyclophosphamide, etoposide, and carboplatin are drugs that may be added if the stage is more advanced or if much anaplasia has been found. Many children with tumor in both kidneys (bilateral Wilms tumor) have surgical biopsies fol-

lowed by chemotherapy before any more surgery is done. The goal for patients with bilateral Wilms tumor is to cure while preserving as much normal kidney as possible.

Before 1970 almost all children were also treated with radiation. Please see NWTS founder Dr. Giulio D'Angio's article on page 3 to learn more about the long-term risks following radiation therapy. His article describes the NWTS efforts over the past 32 years to decrease the number of children who receive this treatment and to reduce the dose of radiation given.

Today we know the optimal treatment for most children diagnosed with Wilms tumor. Work continues on trying to identify effective treatment for patients with unfavorable histologies. The NWTS also continues to follow participants after treatment has stopped to make sure that we know

how different types of treatment may or may not be related to health problems in later years. Some findings will not show up for many years, and we are dedicated to maintaining surveillance until the answers are known. ♦

Pat Norkool  
NWTS Project Manager



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## Stages of Wilms Tumor

Stage I.

The tumor is limited to the kidney, is encapsulated, and can be completely removed surgically.

Stage II.

The tumor extends beyond the kidney but is completely removed.

Stage III.

The tumor is not completely removed surgically, but disease is still limited to the abdomen.

Stage IV.

The disease has spread to the lung, liver, bone, brain, or to lymph nodes outside the pelvic region.

Stage V.

Both kidneys contain tumor at diagnosis.



## Study Forms Available On-Line

We send forms to participants three months before they are due.

However, if you ever want to reprint a copy of a form we sent to you, you may download the NWTS Late Effects Forms in Adobe PDF. To do so, follow these links:

1. <http://www.nwtsg.org>
2. Institutional Information
3. Forms: Late Effects

## When Was Your Last Physical Exam?

We recognize that some participants may not have health insurance. While completion of the Physical Exam form is not a requirement for participation, we encourage all childhood cancer survivors to schedule annual physicals. Even if you are long overdue for a physical exam, it's never too late to have one.

You can obtain a physical exam from any physician. He or she does not have to be an oncologist.