Wilms Tumor

Protocol applies to specimens from patients with Wilms tumor (nephroblastoma) or other renal tumors of childhood.

Protocol revision date: January 2005
No AJCC/UICC staging system

Procedures
• Cytology (No Accompanying Checklist)
• Incisional Biopsy (Needle or Wedge) (No Accompanying Checklist)
• Partial Nephrectomy
• Radical Nephrectomy

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For the Members of the Cancer Committee, College of American Pathologists
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The College of American Pathologists offers these protocols to assist pathologists in providing clinically useful and relevant information when reporting results of surgical specimen examinations of surgical specimens. The College regards the reporting elements in the “Surgical Pathology Cancer Case Summary (Checklist)” portion of the protocols as essential elements of the pathology report. However, the manner in which these elements are reported is at the discretion of each specific pathologist, taking into account clinician preferences, institutional policies, and individual practice.

The College developed these protocols as an educational tool to assist pathologists in the useful reporting of relevant information. It did not issue the protocols for use in litigation, reimbursement, or other contexts. Nevertheless, the College recognizes that the protocols might be used by hospitals, attorneys, payers, and others. Indeed, effective January 1, 2004, the Commission on Cancer of the American College of Surgeons mandated the use of the checklist elements of the protocols as part of its Cancer Program Standards for Approved Cancer Programs. Therefore, it becomes even more important for pathologists to familiarize themselves with the document. At the same time, the College cautions that use of the protocols other than for their intended educational purpose may involve additional considerations that are beyond the scope of this document.
Summary of Changes to Checklist(s)

Protocol revision date: January 2005

The following changes have been made to the data elements of the checklist(s) since the January 2004 protocol revision.

Kidney: Resection for Wilms Tumor Checklist

Macroscopic

Tumor Characteristics: The option, “Cannot be determined,” was added under dimensions, as shown below

Tumor Characteristics (check all that apply)
Number of tumor nodules: ___
For each nodule:
  Greatest dimension: ___ cm
  *Additional dimensions: ___ x ___ cm
  ___ Cannot be determined (see Comment)
Location(s) (specify): ____________________________
  ___ Cannot be determined (see Comment)

Important Note

First priority should always be given to formalin-fixed tissues for morphologic evaluation. The second priority for tissue processing may include snap-freezing up to 1 gram (minimum of 100 mg) of tumor for molecular studies (Note A).

For more information, contact: The Children’s Oncology Group Biopathology Center; Phone: (614) 722-2890 or (800) 347-2486.
Surgical Pathology Cancer Case Summary (Checklist)

Protocol revision date: January 2005
Applies to specimens from patients with Wilms tumor (nephroblastoma) or other renal tumors of childhood
No AJCC/UICC staging system

KIDNEY: Resection for Wilms Tumor

Patient name:
Surgical pathology number:

**Note: Check 1 response unless otherwise indicated.**

MACROSCOPIC

Specimen Type
___ Partial nephrectomy
___ Radical nephrectomy
___ Other (specify): ____________________________
___ Not specified

Laterality
____ Right
____ Left
____ Not specified

Kidney Size
Kidney dimension: ___ x ___ x ___ cm
Weight: _____ grams
Description of perirenal fat/Gerota’s fascia: ____________________________

*Tumor Site (check all that apply)
*___ Upper pole
*___ Middle
*___ Lower pole
*___ Other (specify): ____________________________
*___ Not specified

Tumor Characteristics
Number of tumor nodules: ___
For each nodule:
   Greatest dimension: ___ cm
   *Additional dimensions: ___ x ___ cm
   ___ Cannot be determined (see Comment)
Location(s) (specify):
   ___ Cannot be determined (see Comment)

* Data elements *with asterisks* are **not required** for accreditation purposes for the Commission on Cancer. These elements may be clinically important, but are not yet validated or regularly used in patient management. Alternatively, the necessary data may not be available to the pathologist at the time of pathologic assessment of this specimen.
Macroscopic Extent of Tumor (check all that apply)
___ Gerota’s fascia intact
___ Gerota’s fascia disrupted
___ Renal vein invasion present
___ Renal vein invasion absent
___ Tumor extension into adrenal present
___ Tumor extension into adrenal absent

MICROSCOPIC

Histologic Type (check all that apply)
___ Wilms tumor, favorable histology
___ Wilms tumor, focal anaplasia
___ Wilms tumor, diffuse anaplasia
___ Congenital mesoblastic nephroma, classical
___ Congenital mesoblastic nephroma, cellular
___ Congenital mesoblastic nephroma, mixed
___ Clear cell sarcoma
___ Rhabdoid tumor
___ Other (specify): ____________________________
___ Malignant neoplasm, type cannot be determined

Nephroblastomatosis
___ Nephrogenic rests, intralobar
___ Nephrogenic rests, perilobar
___ Nephrogenic rests, unclassified
___ No nephrogenic rests
___ Cannot be determined

Margins (check all that apply)
___ Cannot be assessed
___ Margins uninvolved by tumor
      Distance of tumor from closest margin: ___ mm
___ Margin(s) involved by tumor
      ___ Gerota’s fascia
      ___ Renal vessels (specify): ____________________________
      ___ Ureter

Renal Sinus (check all that apply)
___ No renal sinus involvement
___ Renal sinus soft tissue involvement
___ Renal sinus vascular involvement

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Regional Lymph Nodes
___ No lymph nodes submitted
___ Cannot be assessed
___ No regional lymph node metastasis
___ Regional lymph node metastasis
Specify: Number of lymph nodes examined: ___
Number of lymph nodes involved: ___

National Wilms Tumor Study Group (NWTSG) Staging System
(check all that apply under the appropriate stage)

Stage I
___ Tumor limited to kidney and completely resected
___ Renal capsule intact
___ Tumor not ruptured or biopsied prior to removal
___ Renal vein contains no tumor (intrarenal vessel involvement may be present)
___ No lymph node involvement or distant metastases

Stage II
___ Tumor extends beyond kidney but completely resected
___ Regional extension of tumor (vascular invasion outside the renal parenchyma or within the renal sinus, and/or capsular penetration with negative excision margin)
___ Operative tumor spillage confined to flank and not contaminating the peritoneum
___ Biopsy (except fine-needle aspiration) prior to surgery

Stage III
___ Nonhematogenous metastases confined to abdomen (eg, tumor in regional lymph nodes), including tumor implants on or penetrating the peritoneum
___ Gross or microscopic tumor remains postoperatively (tumor at margins of resection)
___ Tumor spill before or during surgery not confined to flank
___ Piecemeal excision of tumor (removal of tumor in more than 1 piece)

Stage IV
___ Hematogenous metastases or lymph node metastases outside the abdomino-pelvic region (beyond renal drainage system, eg, lung, liver)

Stage V
___ Bilateral renal involvement at diagnosis (each side should also be staged separately, according to above criteria, as I to IV)
Specify (both): Right kidney stage: ___
Left kidney stage: ___

Note: Separate reports are required for bilateral involvement. See surgical pathology report for other kidney.

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* Additional Pathologic Findings
  * Specify: ______________________________

* Comment(s)