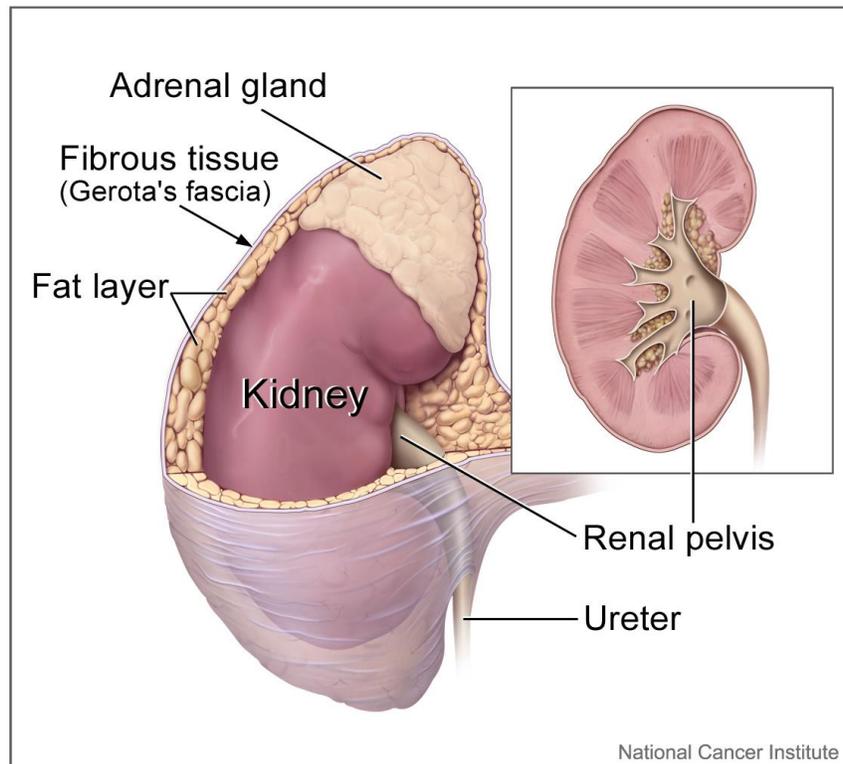
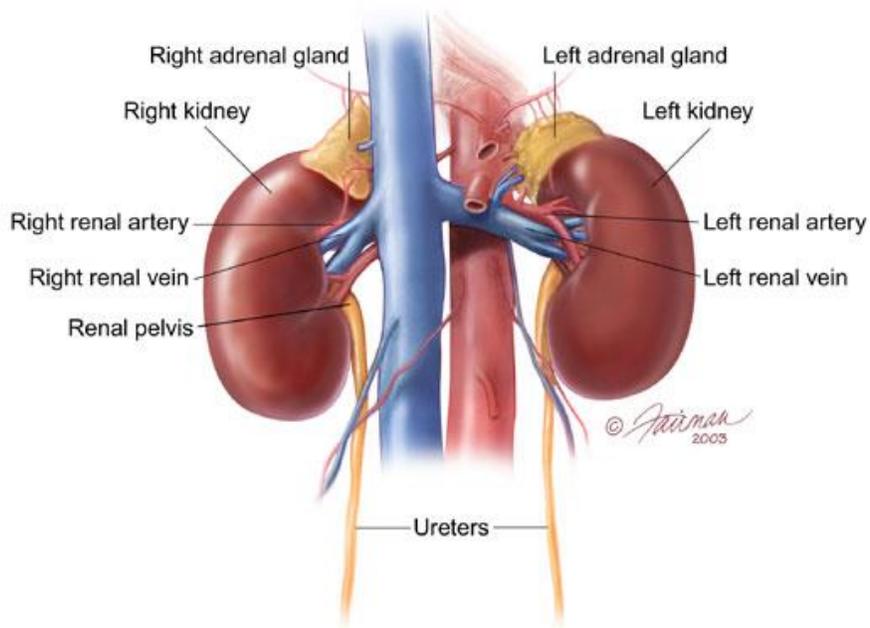


Genitourinary Grossing Guidelines

Specimen Type: NEPHRECTOMY For Tumor



Genitourinary Grossing Guidelines

Procedure:

1. Weigh and measure overall dimensions of specimen. Ink the surface of Gerota's fascia or perinephric fat, either the entire surface or the surface overlying a palpable tumor.
 2. Inspect perinephric fat for adrenal, tumor extension; palpate for hilar lymph nodes.
 3. Locate ureter (often with a staple or clip at the distal end). Measure the length and diameter of ureter. Locate renal arteries and vein, look for tumor thrombus in the renal vein.
 4. Remove vascular and ureteral margins and place in cassette, en face.
 5. Place a probe into ureter, and extend it into renal pelvis. Open ureter along its length. Examine ureteral mucosa.
 6. At renal hilum, push one probe through renal pelvicalyceal system and push through parenchyma of superior pole of kidney.
 7. Place second probe in renal pelvicalyceal system and push through parenchyma of inferior pole of kidney.
 8. Using 2 probes as guides, divide kidney in two complete halves, cutting through the renal pelvis. Completely open pelvis, calyces, and renal veins.
 9. Measure kidney.
 10. Look for renal sinus invasion, renal vein invasion, and capsular invasion by tumor. Measure and describe adrenal (? tumor involvement) if present.
 11. Photograph half of the specimen or both halves.
 12. Describe tumor: single/multiple lesions, dimensions, demarcation, color, texture, hemorrhage/necrosis/cystic degeneration, extension into renal sinus/into renal vein/through capsular surface, areas of sarcomatoid differentiation.
 13. After taking sections of tumor, bread loaf the uninvolved kidney in 1 cm interval, look for additional lesions, describe uninvolved kidney: external surface, cortex, medulla, and pelvis.
 14. Look for hilar lymph nodes.
- For any solid or solid-cystic tumor >2 cm → collect tissue for cytogenetics
 - For tumors <2 cm or cystic tumors without solid component → do not need to collect tissue for cytogenetics

Gross Template:

Labeled with the patient's name (**), medical record number (**), designated "****", and received [*fresh/in formalin*] is a [*right,left*] ***g, *** x *** x *** cm total nephrectomy. The kidney alone measures *** x *** x *** cm . The ureter measures *** cm in length x *** cm in diameter. The renal artery measures *** cm in length x *** cm in diameter. The renal vein measures *** cm in length x *** cm in diameter. [*Describe adrenal gland if present- weigh and measure*].

Sectioning reveals a [*describe mass- size, focality, circumscription, encapsulation, color, consistency, necrosis, hemorrhage*] located in the [*upper, mid, lower pole*]. The

Genitourinary Grossing Guidelines

mass extends [*into the renal sinus fat, perinephric fat, to Gerota's fascia, into the pelvicalyceal system, into the renal vein, adrenal gland, other*]. [*Describe satellite nodules*]. The mass measures *** cm from Gerota's fascia/perinephric fat margin, *** cm from the renal vein margin.

The remaining parenchyma is [*unremarkable, or describe additional pathology*]. The corticomedullary junction is [*distinct/ poorly defined*]. The pelvicalyceal system [*is/ is not*] dilated. [*Describe calculi if present*] [*describe obstruction and dilation of calyces if present*]. The mucosa of the collecting system is [*smooth, roughened, granular, thickened, other.*] The ureter [*describe stenosis, dilation, lesions present*].

No additional lesions or masses are identified. A portion of tumor tissue is submitted in RPMI for cytogenetics studies. Representative sections are submitted [*describe cassette summary*]. Gross photographs are taken.

Ink key:

Capsule/Gerota's fascia/perinephric fat: black

*You may differentially ink Gerota's fascia so that you do not forget to sample this area while grossing

Cassette Submission: 8-10 cassettes

- One cassette of non-neoplastic parenchyma (at least 2 cm away from tumor), try to include cortex, medulla, and calyceal mucosa
 - o **This should be placed in cassette A1 (It will be a pink block, which includes 1 PAS stain).**
- 1-2 cassette of vascular and ureteral margins, shave
- Tumor sections:
 - o If tumor is <3 cm → submit tumor entirely
 - o If tumor is >3 cm → submit 3 sections +1 section per cm, up to 12 sections
 - o Section to demonstrate renal sinus fat invasion
 - 1 section if tumor grossly invades sinus fat
 - 4-5 sections if no gross invasion
 - o Sections to demonstrate the perinephric fat invasion
 - o Sections to demonstrate vein invasion
 - o Sampling areas of different color and consistency
 - 1 section with necrosis
 - 1 section with adjacent unremarkable kidney
- Additional sections should be taken as needed
 - o Sections of satellite nodules
- One cassette of adrenal gland (if present)
- Submit all hilar lymph nodes (if present)

- **WILM'S TUMOR**
 - o 1 section per 1 cm of tumor, up to 8 cassettes

Genitourinary Grossing Guidelines

- Note: Any small foci beneath the capsule or adjacent to the pyramids may represent nodular renal blastema and representative sections should be obtained of these areas. As a guide, there should be one section per cm. of maximum dimension of the tumor up to 8 cm. A map of the tumor labelling the exact site of the sections taken must be included with the gross.

