Genitourinary Grossing Guidelines

Specimen Type: NEPHRECTOMY (non tumor) –pylonephritis, hydronephrosis, polycystic, allograft nephrectomy

Procedure:

* Prior to fixation, please discuss with renal pathologist on service to ensure that no IF, EM, or other ancillary studies are required

1. Measure overall dimensions of specimen (may include kidney and perinephric fat).
2. Remove perinephric fat + adrenal if present. Weigh and measure kidney. Strip capsule from kidney; describe capsule and whether it strips easily or is adherent to cortex.
3. Describe: Smooth, granular (finely or coarsely), scars or depressions, cysts, hemorrhage.
4. Locate ureter (in general, there is a staple or a suture at the distal end).
5. Remove ureter margin and place in cassette.
6. Place probe into ureter, and extend it into renal pelvis. Open ureter along its length, cutting towards the pelvis.
7. At renal hilum, push one probe through renal pelvic/calyceal system (usually very easily done as this is a "cavity") and push through parenchyma of superior pole of kidney.
8. Place second probe in renal pelvic/calyceal system and push through parenchyma of inferior pole of kidney.
9. Using probes as guides, divide kidney in half. Completely open pelvis and calyces with scissors if necessary.
10. Describe cortex (thickness, color). Is the corticomedullary junction well-defined? Describe, if present, cysts (approximate number, range of size, type of fluid within, lining), infarcts, hemorrhage, abscesses, crystals in medulla, etc.
    a. Carefully examine cysts for solid areas, including thickened walls, or papillary areas. These may contain areas of neoplasia. If there is concern for neoplasia, process per neoplastic nephrectomy grossing guidelines.
11. Describe pelvis/calyces: Dilated or blunted, stones, mucosa smooth and glistening or dull, granular, erythematous, etc.
12. Describe ureter: Length, diameter, dilated or constricted.
13. Measure length of attached renal artery and vein; look for hilar lymph nodes.
14. Describe adrenal, if present.

Gross Template:
Labeled with the patient's name (***), medical record number (***), designated "***", and received [*fresh/in formalin*] is a [*right,left*] *** gram, *** 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*].

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The capsule is remarkable for [*describe defects, adhesions, fibrosis, granular, etc.*] The cortex [*describe thickness, distinct/indistinct CMJ, cysts, other*]. The medulla [*describe color and shape of pyramids, cysts*]. The pelvicalyceal system [*is/ is not*] dilated. The sinus adipose tissue [*is/ is not*] decreased. Calculi [*are/ are not*] 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*]. The vessels are remarkable for [*plaque, thrombus, other, unremarkable*].

No lesions or masses are identified. A portion of tissue is held in glutaraldehyde for possible future electron microscopy studies. Representative sections are submitted [*describe cassette summary*]. Gross photographs are taken.

Cassette Submission: 5-6 cassettes
- Include 1 section of normal kidney. **This should be placed in cassette A1 (It will be a pink block which includes 1 PAS stain).**
  - You may be able to include a full thickness section from capsule to calyceal mucosa
- 2-3 sections to include sections of scarred areas or pathologic alterations (including cortical surface, collecting system, ureter, and blood vessels)
- 1 cassette to include ureter, artery, and vein margins
- 1 section of adrenal gland, if present
- 1 cassette of renal sinus fat, particularly so in transplant nephrectomies
- Lymph nodes, if present