# **Genitourinary Grossing Guidelines**

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

<u>Case Assignment:</u> These cases should be assigned to the medical RENAL service and **NOT** the GU service

#### 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. Measure kidney alone
  - 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.
  - 15. Gross photos are required for all nephrectomy cases

# **Gross Template:**

# **MMODAL Command: "INSERT NEPHRECTOMY"**

It consists of a [right, left\*\*\*], [weight\*\*\*] gram, [measure in three dimensions\*\*\*] cm total nephrectomy. The kidney alone measures [measure in three dimensions \*\*\*] cm. The ureter measures [\*\*\*] cm in length

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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.

The renal capsule is [unremarkable OR remarkable for defects/adhesions/fibrosis/granular\*\*\*]. The corticomedullary junction is [distinct/not distinct\*\*\*]. The cortex [describe thickness, 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, and if present, describe obstruction and/or dilation of calyces\*\*\*]. 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. Gross photographs are taken. Representative sections are submitted.

# **Cassette Submission:** 3-4 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
- 1-2 sections of pathologic alterations (including areas of scarring or other lesions in any areas including cortex, medulla, collecting system, ureter, and blood vessels as needed)
- 1 cassette to include ureter, artery, and vein margins
- 1 section of adrenal gland, if present
- Lymph nodes, if present