

## Genitourinary Grossing Guidelines

**Specimen Type:** NEPHROURETERECTOMY (resection)

**Procedure:**

1. Weigh and measure overall dimensions of specimen. Ink the surface of kidney/Gerota's fascia or perinephric fat. Describe external surface of ureter and palpate for tumor in ureter, ink ureter differentially following the ink codes below.
2. Inspect perinephric fat for adrenal (usually absent). Locate renal arteries and vein. Remove vascular margins and place in one cassette, en face.
3. Measure the length and diameter (range in diameter) of the ureter and bladder cuff if present.
4. If a bladder cuff is present, amputate it, radially section centering the ureteral orifice, and submitted entirely in 2-3 cassettes.
5. If bladder cuff is not present and mass is not close to distal ureteral margin, shave the distal ureter margin. If mass is close to distal ureter margin, a perpendicular section should be taken.
6. Open ureter along its length. Examine ureteral mucosa.
7. At renal hilum, push one probe through renal pelvicalyceal system and push through renal parenchyma of superior pole.
8. Place second probe in renal pelvicalyceal system and push through renal parenchyma of inferior pole.
9. Using 2 probes as guides, divide kidney in two complete halves, cutting longitudinally through the renal pelvis. Completely open pelvis and calyces.
10. Measure kidney. Examine pelvicalyceal mucosa
11. Describe mucosal tumors, including the number, size, shape, location, distance from the pelvi-calyceal junction and distal margin
12. Pin the ureter, photograph the entire ureter and half of the kidney. If tumor is friable, fix overnight.
13. Take transverse sections of the tumor and ureter / take sections of tumor and pelvis. Describe extent of invasion and measure depth of invasion and distance to circumferential/deep margin.
14. Document if the ureter mass causes strictures or dilatation.
15. If tumor is small enough, submit entire tumor proximal to distal sequentially. If tumor is big, submit representative sections to include the greatest depth of invasion and the closest circumferential/deep margin.
16. Describe uninvolved mucosa of ureter and renal pelvis and measure ureter wall.

**Gross Template:**

**MMODAL Command:** "INSERT KIDNEY URETER"

It consist of a [*right/left*\*\*\*], [*weight*\*\*\*] gram, [*measure in three dimensions*\*\*\*] cm nephroureterectomy. The kidney alone measures [*measure in three dimensions*\*\*\*] cm. The ureter measures [*\*\*\**] cm in length and ranges from [*smallest to largest*\*\*\*] cm in diameter. A bladder cuff margin is [*not identified/present*\*\*\*].

## **Genitourinary Grossing Guidelines**

The pelvicalyceal system and proximal ureter [are/are not\*\*\*] dilated. [*Describe calculi if present, otherwise delete this sentence\*\*\**] [*Describe obstruction and dilation of calyces if present, otherwise delete this sentence\*\*\**] There is a [*measure in three dimensions\*\*\**] cm [*describe lesion, white-tan papillary/friable\*\*\**] lesion located in the [*describe renal pole if located in kidney OR prox/mid/distal area if located in ureter\*\*\**]. Sectioning of the mass reveals [*white-tan, friable, firm\*\*\**] cut surfaces, and the mass measures [*\*\*\**] cm in deepest invasion. The mass is located [*\*\*\**] cm from the circumferential ureter margin, and [*\*\*\**] cm from the [*ureteral/bladder cuff\*\*\**] margin. The remaining pelvic and ureter mucosa is [*pink-tan, unremarkable/smooth, roughened, granular, thickened, other\*\*\**]. [*Describe additional mucosal lesions or erythematous patches, otherwise delete this sentence\*\*\**]

The uninvolved ureteral wall is tan-white and has a [*\*\*\**] cm average thickness. The renal parenchyma is [*unremarkable, or describe additional pathology\*\*\**]. The corticomedullary junction is [*distinct/ poorly defined\*\*\**]. [*Describe the adrenal gland, weighing and measuring separate from the kidney. If not present, delete this sentence\*\*\**] [*Number/Multiple\*\*\**] hilar lymph nodes are identified ranging from [*smallest to largest\*\*\**] cm in greatest dimension. Gross photographs are taken. Representative sections are submitted.

### **INK KEY:**

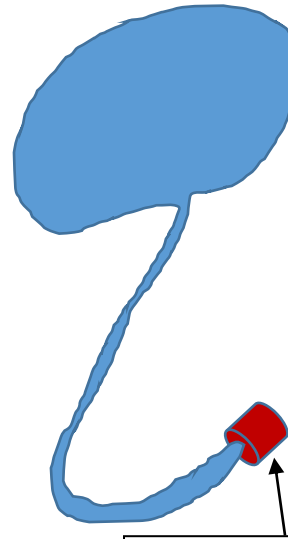
Blue      Kidney external surface and proximal third of ureter  
Black     Mid portion of ureter  
Green     Distal third of ureter  
Red       Bladder cuff margin

[*insert cassette summary\*\*\**]

### **Cassette Submission:**

- Renal vascular margin, en face
- Distal ureter margin, en face / bladder cuff margin, radially sectioned
- One section per 1 cm of tumor, up to 5 cassettes
  - To include renal pelvic tumor with invasion into muscularis, renal parenchyma, or hilar fat
  - To include ureter tumor with the deepest invasion into the ureteral wall, periureteric fat, closest circumferential margin.
- Submit additional mucosal lesions
- Grossly uninvolved renal pelvis, proximal and distal ureter.
- Renal parenchyma, representative
- Submit all lymph nodes

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Bladder cuff margin, where the ureter inserts into bladder