

Genitourinary Grossing Guidelines

Specimen Type: ADRENALECTOMY (morcellated or intact resection)

Note: For Neuroblastoma and other related tumors: See Pediatric Grossing Guidelines

Procedure:

1. Weigh and measure overall dimensions of specimen (Normal adrenals weigh from 4 to 6 grams). Ink the entire surface in one color, if received intact.
2. If malignant adrenal tumor is suspected clinically, inspect periadrenal fat for tumor extension and tumor thrombus in the adrenal vein.
3. Serially section the specimen perpendicular to the long axis in 3 mm intervals, and examine cut sections for mass or nodule.
4. Measure adrenal gland and mass.
5. Rarely, if no mass or nodule identified and diffuse adrenal hyperplasia is clinically suspected, remove the periadrenal fat, weigh, and measure the adrenal gland.
6. Photograph serially sectioned specimen, particularly the slice containing the largest dimension of tumor and with the closest resection margin.
7. Describe tumor: single/multiple, size, color, texture, hemorrhage/necrosis/cystic degeneration, relationship with normal adrenal (cortical neoplasms arise from the cortex, pheochromocytoma arise from the medulla), extension into periadrenal adipose tissue or adrenal vein, and distance to the closest inked margin.
8. Briefly describe uninvolved adrenal: cortex (yellow) and medulla (gray), measure the thickness of cortex, and the presence or absence of nodularity.
9. Serial section the periadrenal fat for additional nodules or lymph nodes.

Gross Template:

Labeled with the patient's name (**), medical record number (**), designated "****", and received [*fresh/in formalin*] is a ** gram, ** x ** x ** cm [*intact, disrupted, morcellated*] adrenalectomy [*with/without*] attached periadrenal adipose tissue.

Sectioning reveals [*describe any lesion present – size, capsule, color, and, if applicable, comment on where the tumor appears to arise from (cortex/medulla)*]. The tumor is [*confined to the adrenal/invades into periadrenal fat/adrenal vein*].

The unremarkable cortex is [*color, uniformity, and presence of nodules*] and measures ** cm in thickness. The medulla is [*thickness, color, uniformity, and presence of nodules*]. [*Describe number/size of lymph nodes identified*]. Representative sections are submitted [*describe cassette submission*].

INK KEY (if received intact):

Black- external surface

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Note: For laparoscopically removed adrenal glands that have been morcellated, examine the fragments of tissue to see if there is any excess adipose tissue. Remove the excess adipose tissue, then weigh and measure the aggregate amount of adrenal tissue fragments. If the largest tissue fragment may contain the majority of tumor, please photograph it. Submit 4-5 blocks of tissue, focusing on areas of nodularity.

- There is no need to ink these morcellated specimens

Cassette Submission:

- **Gland with no discrete lesion:** One cassette including medulla and cortex
- **Gland with primary tumor:**
 - For small tumors (<50 grams and <5cm)
 - o submit entire nodule if it is <2cm
 - o submit 3 sections +1 section per cm if tumor is larger than 2cm
 - o if tumor is large (>50 grams or >5cm), sample areas of necrosis
 - o submit at least 5 sections of tumor with capsule and periadrenal fat.
Check for vascular invasion
 - 2 sections of adrenal away from tumor, try to include cortex, medulla, and sample areas of nodularity if present
- **Gland with known metastatic tumor:** 1-2 cassettes of tumor

Cross-section of an Adrenal Gland

