Carcinoma, adrenal cortical
8370/3
Site: Cortex of adrenal gland
C74.0
4/29/13

OC ID:

TSS ID:

Tumor ID:

UUID:9C523464-BFDB-4C7A-972E-2EBECDBBFF3E
TCGA-PA-A5YG-01A-PR

Redacted

SPECIMEN(S):

A: Lipoma

B: Left adrenal gland and mass

FINAL DIAGNOSIS:

B. Adrenal gland, left, excision:

- Adrenal cortical carcinoma, low grade.
- 7.8 cm greatest dimension
- 171 gm
- Margins of resection free of malignancy
- See case summary.

A. Soft tissue, back, excision:

- Lipoma.

COMMENT:

This case has been reviewed, who concurs with the interpretation of low-grade adrenal cortical carcinoma. The findings of a sheet-like infiltration pattern, necrosis, capsular vascular invasion, and nuclear atypia are fairly typical of carcinomas. In addition, the size in excess of 7 cm and the weight of 171 gm are also both more

Criteria	Yes	No
Diagnosis Discrepancy		✓
Primary Tumor Site Discrepancy		✓
HIPAA Discrepancy		✓
Prior Malignancy History		✓
Dual/Synchronous Primary Noted		✓

Case is (circle): QUALIFIED / DISQUALIFIED
Reviewer Initials BTF Date Reviewed: 2/22/13

typical of carcinoma. The eosinophilic cytoplasm is also more typical of carcinoma. Absolute distinction between adrenal cortical adenomas and carcinomas is not always possible; however, multiple series have shown having many of the features described are associated with malignant behavior. American Journal Clinical Pathology, 1996; 105:76-86.

Specimen: Adrenal gland; received: Fresh

Procedure: Adrenalectomy, total

Specimen Integrity: Intact

Specimen Size: Greatest dimensions: 17 x 8 x 4.9 cm

Specimen Laterality: Left

Tumor Size: a 7.8 x 5.7 x 4.6 cm

Tumor Gland Weight: 171 gm

Histologic Type: Adrenal cortical carcinoma

Margins: Margins uninvolved by tumor

Lymph-Vascular Invasion: Small vessel (capillary lymphatic)

Pathologic Staging: pT2 pNX

Primary Tumor (pT): pT2: Tumor greater than 5 cm, no extra-adrenal invasion

Regional Lymph Nodes (pN): pNX: Cannot be assessed

No nodes submitted or found

Distant Metastasis (pM): Not applicable

I have personally reviewed all specimens and or slides, including the listed special stains, and used them with my medical judgement to determine the final diagnosis.

CLINICAL HISTORY:

The patient is a -year-old male with growth on adrenal gland.

Operative Procedure: Lipoma excision and left adrenal gland and mass excision.

GROSS:

Two formalin-filled containers are received, each labeled with the patient's name, and medical record number.

A. The first container is labeled "A -lipoma." The specimen consists of four tan-red-white, and cauterized rubbery tissue measuring ranging from 0.7 to 1.6 cm in greatest dimension and 1.8 x 1.5 x 0.8 cm in aggregate. Sectioning reveals yellow-red solid cut surface. Entirely submitted in A1 and A2.

B. The second container is received fresh and subsequently saved in formalin and labeled "B - left adrenal gland and mass." The specimen consists of a 17 x 8 x 4.9 cm and 171 gm portion of yellow lobulated fibroadipose tissue. The entire external surface is inked black. Sectioning reveals a 7.8 x 5.7 x 4.6 cm yellow-brown solid,

ovoid mass. Focal white firm calcifications measuring up to 0.5 cm in greatest dimension is noted in the central area. Also, a 2.5 x 1.5 x 1.3 cm pink and lightly fleshy area is present on the peripheral area of the mass. A purple-red hemorrhage is noted measuring up to 2.5 cm in greatest dimension. Grossly, the mass is entirely encapsulated. On the edge of the mass is a 4.5 x 2.5 x 1.0 cm bright yellow-brown adrenal gland tissue. Representative tissue was procured for potential future studies. The specimen is photographed. Representative sections are submitted.

Summary of Sections:

B1 -B3 mass with adrenal gland.

B4-B5 - mass to include the pink solid area.

B6 - mass to include hemorrhage.

B7 - mass.

B8 - mass to include calcification following fixation and decalcification.

MICROSCOPIC:

Microscopic examination is performed.

Sections show a low-grade adrenal cortical carcinoma. The adrenal is expanded by a 7 cm nodule of eosinophilic cells, many with nucleomegaly and poly-lobation. Tumor is arranged largely in sheets, without trabecular or small cell patterning. The neoplasm is thickly

encapsulated, with foci of necrosis. Focally, there is vascular penetration of the capsule; however, the marked margins of resection are free of malignancy. Mitotic activity is inconspicuous.

Immunohistochemical stains performed on the tumor show focal immunoreactivity to vimentin. Melan-A is focally positive, with good internal control. There is no immunoreactivity with antibodies to Pan-Cytokeratin (AE1/AE3). There is weak focal immunoreactivity with antibodies to synaptophysin, but not with antibodies to chromogranin.. S-100 highlights normal adipocytes. An antibody to inhibin highlights normal adrenal cortical cells, but does not react with the tumor.