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TCGA-P6-A5OH-01A-PR Redacted



ICD-6-3
Carcinoma, adrenal cortical
8370/3
Site Adrenal Gland cortex
C74.0
JUL 4/29/13

General Pathologic Examination

Patient: [REDACTED]

Date of Report:

This autopsy study was done for research purposes only and should therefore not be considered to be definitive or exhaustive.

EXTERNAL EXAM: The body is that of a middle-aged, moderately obese Caucasian female, measuring 165 cm in length. The body is identified by ID bracelets about the left wrist and left ankle. Rigor mortis is not established and there is dependent lividity. The normocephalic head has been recently shaved or cut very close to the scalp. The external ears, nose, and mouth are unremarkable. The forward directed eyes show white sclera, blue irides, and the pupils are round, regular and equal. The chest is symmetrical and the breasts are normal without masses or skin lesions. The abdomen is obese and distended. There is a catheter protruding from a small incision in the right upper chest and beneath, subcutaneously, there is a palpable hard, disc-shaped device, about 2 cm in diameter, consistent in size and location with a medication port. There is a midline scar between the umbilicus and the symphysis pubis measuring 12 cm in length. The extremities are equally developed and the lower legs and feet are covered by gauze bandages (history of Herpes zoster skin lesions). There is edema of both feet. There is clear plastic tubing emanating from the urethra, connected to a plastic bag with approximately 50 ml of brownish-yellow fluid. The external genitalia are those of a normal female. The dorsum is unremarkable.

INTERNAL EXAM: The body is opened with a thoracoabdominal incision to reveal all organs in their normal anatomic locations. A plastic and metal device consistent with a medication port is present subcutaneously over the upper part of the right chest, as described above on the external exam, measuring 2 cm in diameter. A plastic catheter is connected to the disc-shaped device. The pleural and abdominal cavities have the normal scanty amount of clear fluid. There are moderate adhesions between loops of small bowel and between the small bowel and ascending colon. Otherwise the pleural and peritoneal surfaces slide freely and are predominantly tan-pink and glistening.

Heart and Vessels: The heart weighs 320 grams. The heart slides freely within the pericardium and when incised there is a normal scanty amount of clear fluid present in the pericardial cavity. Limited dissection of the heart at autopsy reveals no evidence of infarctions. The left ventricular myocardium is 1.5 cm in maximal thickness. The thoracic and abdominal portions of the aorta have mild fatty streaking with no ulcerated plaques or calcifications.

Lungs: The right and left lungs are normally lobated and weigh 460 and 275 grams, respectively. The visceral pleura are pinkish-tan and moderately anthracotic. Hilar dissection reveals the bronchi and pulmonary arteries to be of normal configuration. No thrombi are identified. The cut surfaces of the left lung consist largely of crepitant, spongy, pink-tan parenchyma without masses, abscesses or consolidation except for focal dark red firm rubbery areas in the posterior lower lobe. The lower lobe, middle lobe and lower parts of the right lung are consolidated, firm to palpation and dark red to black in color, with normal pinkish-tan crepitant parenchyma only in the upper part of the upper lobe.

Esophagus: The esophagus is lined by longitudinally folded, gray-white mucosa without gross lesions. No masses or thickenings are identified.

Stomach: The stomach contains approximately 50 cc of dark green liquid. The mucosa is soft, tan and has normal rugal folds without ulcers or masses. The gastric wall is of uniform consistency and thickness.

Small Intestine: There are moderately frequent adhesions between loops of small bowel and between small bowel and ascending colon. The mucosa of the small intestine is tan with normal folds. The mesentery is normal, without masses or hemorrhage.

Large Intestine: The ascending, transverse, descending and sigmoid colon as well as rectum are unremarkable except for the aforementioned adhesions with loops of small bowel.

Pancreas: The pancreas is of normal size and shape, the cut surfaces showing normal tan-yellow, lobulated parenchyma.

Liver: The normally lobated liver weighs 2255 grams. There is an area of raised, knobby protrusions on the posterior and inferior surfaces of the right lobe, where the tissue has a yellowish tan color and is firm on palpation. Similar nodules of tissue protrude from other places on the capsule as well. Otherwise the capsule is smooth and red-brown. The cut surfaces reveal red-brown parenchyma of uniform consistency except for the presence of a large, multilobular, cauliflower-like, yellow-tan tumor, 12 x 10 x 6 cm, underneath the region described as protruding from the inferior-posterior capsule. There are 3 or 4 similar nodules elsewhere in the right lobe, having the same appearance but much smaller, 1-3 cm in diameter each.

Gallbladder: The gallbladder is present and contains a small amount of dark green bile without stones.

Kidneys: The left kidney weighs 120 grams. The perirenal retroperitoneal fat is hemorrhagic. The right kidney weighs 160 grams. Both have patent hilar vessels and the renal capsules peel from each with a little difficulty to reveal smooth red-brown cortical surfaces. Slices show well defined corticomedullary junctions, well-defined renal pyramids, patent calyceal system and pelvis lined by finely folded, gray-white mucosa.

Urinary Bladder: The bladder is small and contains no urine. The bladder wall is of uniform thickness and is spongy in consistency. The mucosa is trabeculated and whitish-tan with frequent small petechial hemorrhages.

Genital Tract: The vagina is unremarkable. The cervix, uterus, ovaries and fallopian tubes are absent.

Thyroid Gland and Parathyroid Glands: The thyroid gland is symmetrical and red-tan in appearance. The cut surface shows homogeneous red-brown tissue. One parathyroid gland is identified.

Adrenal Glands: In the regions where the right adrenal gland should be is a large, irregularly shaped mass, roughly ovoid, measuring 10 x 9.5 x 4 cm. Blunt dissection frees the abnormal mass relatively easily from all adjacent structures. Once dissected free, it weighs 22 grams. The cut surface shows two types of tissue, sharply demarcated roughly in the middle, with one type showing reddish-purplish-black soft spongy tissue while the other part shows yellow-tan, somewhat more firm tissue with a cauliflower-like appearance. The left adrenal gland is markedly swollen, enlarged and has an abnormal bluish-purple-black appearance on cut section.

Spleen: The spleen weighs 100 grams. The capsule is intact. The cut surfaces consist of soft, dark red-brown parenchyma with visible white pulp.

Lymph Nodes: The peribronchial lymph nodes are anthracotic. Elsewhere in the body, lymph nodes are of normal size and shape and are non-anthracotic.

Skull and Brain – see neuropath report

Microscopic Examination: Paraffin-embedded H&E stained sections of organs and tissues show normal or unremarkable structure except for the following. There is adrenal cortical carcinoma involving the right adrenal gland with metastasis to the liver. There is acute bronchopneumonia involving the right lung with patchy infarct-like necrosis and numerous coccoid bacteria. The lung away from the area of bronchopneumonia shows mild emphysematous change

and focal subpleural fibrosis suggestive of a healed previous injury or infection. The breast tissue is benign and shows a small complex sclerosing lesion (radial scar) with usual duct hyperplasia. There is minimal atherosclerosis in the thoracic and abdominal aorta.

Final Body Diagnosis:

1. Adrenal cortical carcinoma, right adrenal gland, with metastasis to liver
2. Hypertrophy, left adrenal gland
3. Acute bronchopneumonia with coccoid bacteria, right lung
4. Mild emphysematous change with focal subpleural fibrosis, lung
5. Cardiomegaly
6. Mild atherosclerosis, aorta
7. Benign breast tissue with small complex sclerosing lesion (radial scar) and usual duct hyperplasia
8. Perirenal hemorrhage, left kidney retroperitoneal fat
9. Adhesions, small and large bowel
10. Status post hysterectomy with bilateral salpingo-oophorectomy
11. Status post subcutaneous Mediport placement, right upper chest

Neuropathologist

10/18/13

Criteria	Yes	No
Diagnosis Discrepancy	/	/
Primary Tumor Site Discrepancy	/	/
HpMA Discrepancy	/	/
PRG: Malignancy History	/	/
Data Synchronous Primary Node	/	/
Case is (circle):	QUALIFIED	DISQUALIFIED
Reviewer Initials	BT	10/13