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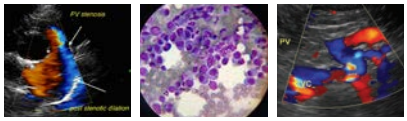
IntraPet.com



SonoPath

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DATE

7/28/22

PATIENT

Tucker Hill

SPECIES

Canine

BREED

Scottie

SEX

Neutered Male

AGE

1/2/10

WEIGHT

24 Pounds

INTERPRETED BY

Kathleen Sennello DVM, MS, Diplomate ACVIM (Small Animal Internal Medicine)

IMAGING PERFORMED BY

Stephanie Warga RDCS, RVT

HOSPITAL NAME

Everhart Vet Hospital

REFERRING VET

Dr. Hays

INVOICE

39936

PRESENTING CLINICAL SIGNS

Patient presents with h/o hematuria and PU/PD. Bladder mass noted on US, cadet braf confirms TCC.

Current Medications: Soon to start Piroxicam 0.3mg SID.
Lab Results: Cadet Braf + for TCC. ALP 410, ALT 211, USG 1.015 with 3+ protein.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Torbugesic IV.
Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with anechoic urine. There is a large mid body polypoid, hyperechoic mass effect measuring 2.72 cm x 2.11 cm. Additionally, there is some thickened abnormal appearing tissue within the proximal/prostatic urethra. There is no evidence of calculi or generalized wall thickening.

The prostate is large, slightly irregular and heterogeneous with pinpoint mineralizations, measuring 2.67 cm x 2.74 cm. Additionally, the slightly irregular, heterogeneous tissue extends into the prostatic urethra, towards the urinary bladder, creating the impression of extension into a possible urethral mass. In this area, the prostatic urethra measures 1.22 cm in diameter.

The left kidney has a normal shape and size (5.25 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size 5.53 cm) with pinpoint non-obstructive nephroliths. Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.72 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

The right adrenal gland is normal in size measuring 0.70 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

Spleen

The spleen is subjectively normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

Liver

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is mildly heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. There is a hypoechoic, ill-defined nodule visualized on the right side of the liver measuring 2.1 cm x 1.55 cm. Additionally, there is a very small, hyperechoic nodule on the left side measuring 0.83 cm x 0.90 cm.

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are primarily anechoic. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. Jejunum wall measured 0.38 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

Pancreas

The pancreas is normal and isoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

Free Abdomen

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

ULTRASONOGRAPHIC FINDINGS

- Hyperechoic, irregular polypoid mass visualized mid body in the urinary bladder – Based on the positive BRAF test reported, there is a very high likelihood that this is a transitional cell carcinoma.

- Large, slightly irregular prostate with pinpoint mineralizations and apparent extension into the prostatic urethra/proximal urethra. This is could be consistent with possible prostatic neoplasia with urethral extension. Consider a fine needle aspirate of the prostate.

- Mildly heterogeneous liver with a hypo- and hyperechoic nodule – These lesions could represent benign or neoplastic lesions. The hyperechoic lesion in particular has a somewhat benign appearance. Consider a fine needle aspirate.

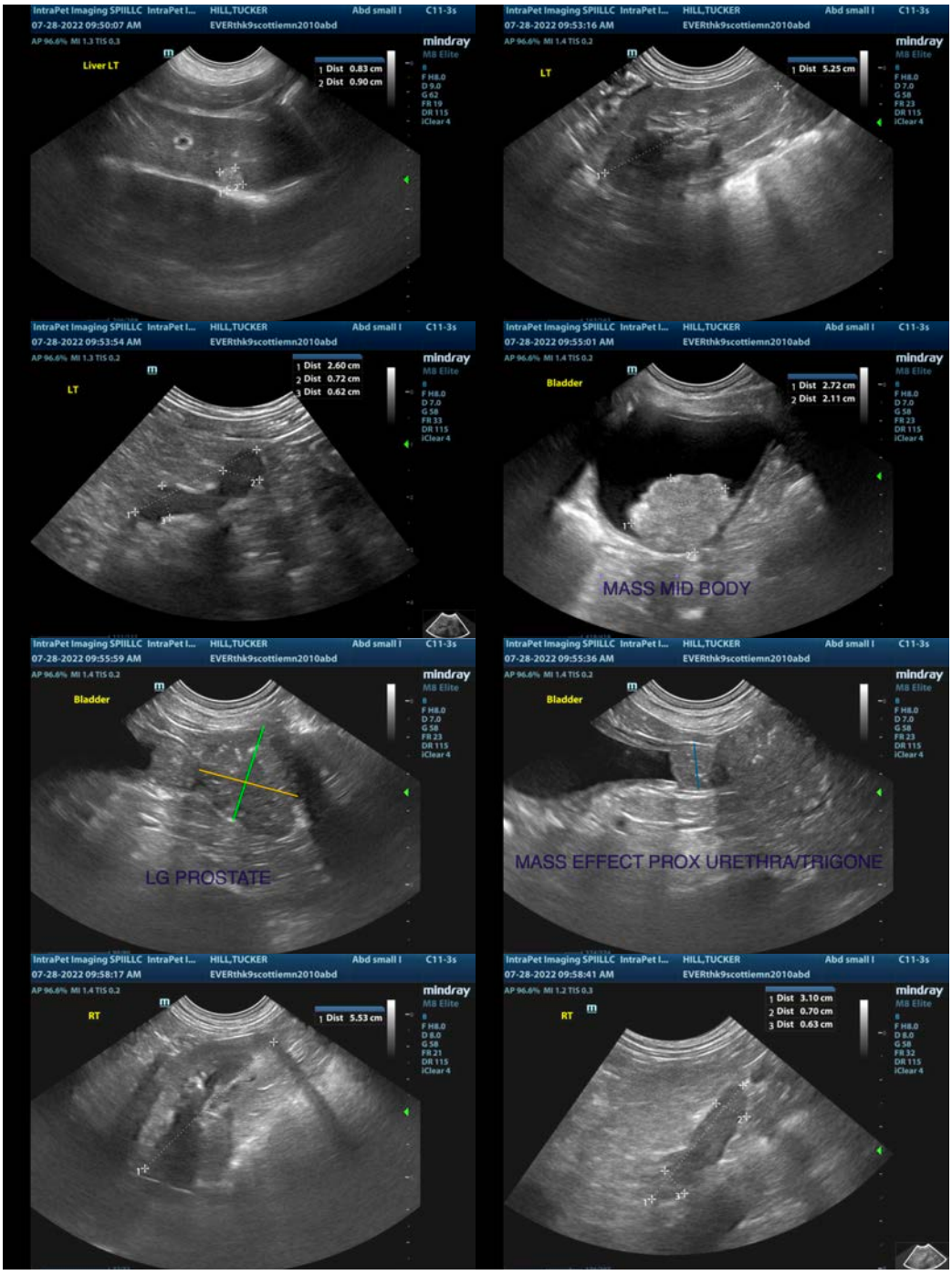
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is a mass effect in the urinary bladder. Considering the positive BRAF test and the breed predilection, this is very likely a transitional cell carcinoma. Additionally, the prostate appears enlarged and there is abnormal tissue extending into the proximal urethra. Scotties are known for having enlarged prostates normally, but the tissue in the urethra is concerning. Consider a fine needle aspirate of the prostate. If there is prostatic involvement in this patient, the prognosis is much worse, and treatment options could vary greatly. If the bladder lesion is the only pathologic lesion, prognosis would be much better with lower risk for imminent complications, longer survival times, etc.

The changes observed in the liver are non-specific, and the nature of the nodules observed is unknown. The

hyperechoic nodule trends towards a more benign appearance. The hypoechoic nodule is ill-defined, and sampling would be necessary to determine its nature.

Consider three view thoracic radiographs to rule out concurrent thoracic disease/involvement.



The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

Thank you for this referral. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance please contact me.

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