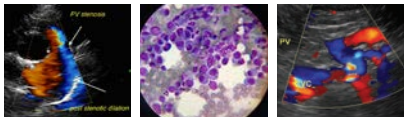
IMAGING PERFORMED BY

IntraPet.com



SonoPath

Clinical Sonography & Telecytology

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DATE

6/30/22

PATIENT

Hanna Harris

SPECIES

Canine

BREED

Shetland Sheepdog

SEX

Spayed Female

AGE

12/30/10

WEIGHT

29 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Rachel Brilhart RDMS

HOSPITAL NAME

Bayside AMC

REFERRING VET

Dr. Sims

INVOICE

39117

PRESENTING CLINICAL SIGNS

Pet is new to our clinic as owners are visiting from out of town.
Vomiting for 5 days. History of elevated liver enzymes.
Bloodwork is pending and I will send this in a separate email.

Current Medications: None listed.
Radiographs: Cranial abdominal mass. On the VD is is in the rt cranial quadrand and is displacing the kidney to the midline.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: STAT requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

The right kidney is normal in size (5.8 cm) and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortices are uniform in texture with some mild increased echogenicity and mild loss of corticomedullary distinction. There is no evidence of pyelectasia or infarcts observed. Non-obstructive areas of mineralization/nephroliths are noted, primarily in the diverticular of the kidney.

The left kidney is normal in size (4.96 cm) and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortices are uniform in texture with some mild increased echogenicity and mild loss of corticomedullary distinction. There is no evidence of pyelectasia or infarcts observed. Non-obstructive areas of mineralization/nephroliths are noted, primarily in the diverticular of the kidney.

Adrenal Glands

The right adrenal gland is normal in size (1.9 cm long x 0.70 cm at the cranial pole and 0.85 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (2.17 cm long x 0.80 cm at the cranial pole and 0.80 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

Spleen

The spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). An approximate 0.5 cm round, hypoechoic nodule was noted in the mid body, non-capsule disrupting. Splenic vasculature appears normal.

Liver

The liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. A large, at least 6-7 cm round, mixed heterogeneous, cavitated, vascular mass is noted extending from the caudal mid to right liver and reaching all the way to the diaphragm in some images. Visible vasculature and biliary tree appear normal without distension or congestion.

The gallbladder is moderately distended with anechoic bile as well as suspended and gravity dependent echogenic debris. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.

Gastrointestinal
The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The visible small intestines are normal in wall thickness and layering (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

Pancreas
The pancreas is prominent (enlarged) in size and mildly irregular in shape with a slightly undulating contour. Parenchyma is coarse in echotexture and heterogenous to hypoechoic in echogenicity.

Free Abdomen
There is no evidence of peritoneal effusion. There is no apparent lymphadenopathy.

No pericardial effusion noted in these images.

PRIMARY FINDINGS

- Large, mixed heterogeneous, cavitated liver mass – most concerning for infiltrative neoplasia such as sarcoma. Primarily liver tumor such as hepatocellular carcinoma or even less likely round cell neoplasia are also differentials. A benign lesion is possible, but considered much less likely.

- Hypoechoic splenic nodule – most consistent with benign cyst or hematoma or extramedullary hematopoiesis. However, given the presence of the liver mass, a metastatic lesion can't be ruled out.

SECONDARY FINDINGS

- Chronic active pancreatitis

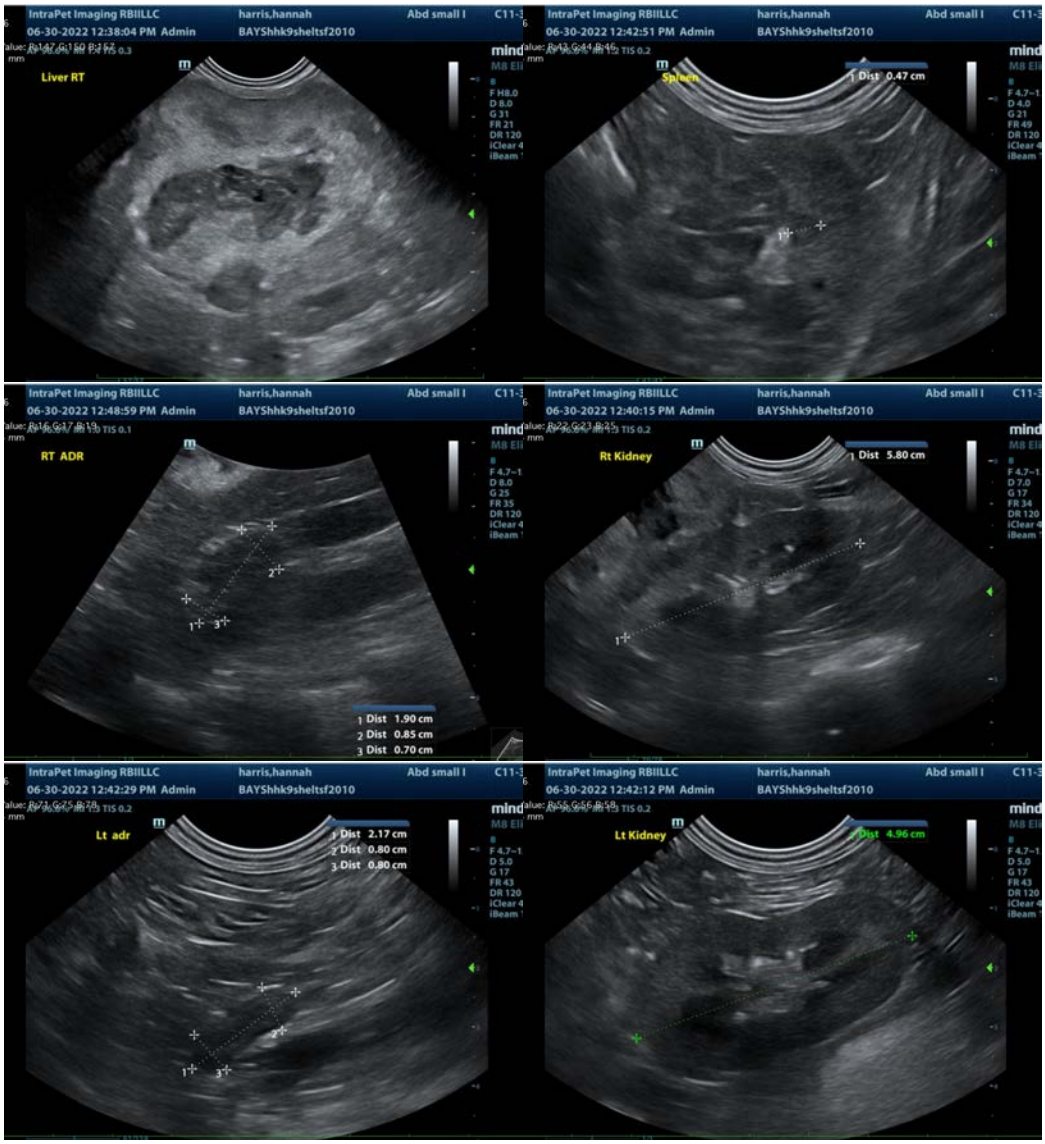
- Age related kidney changes with non-obstructive mineral bilaterally

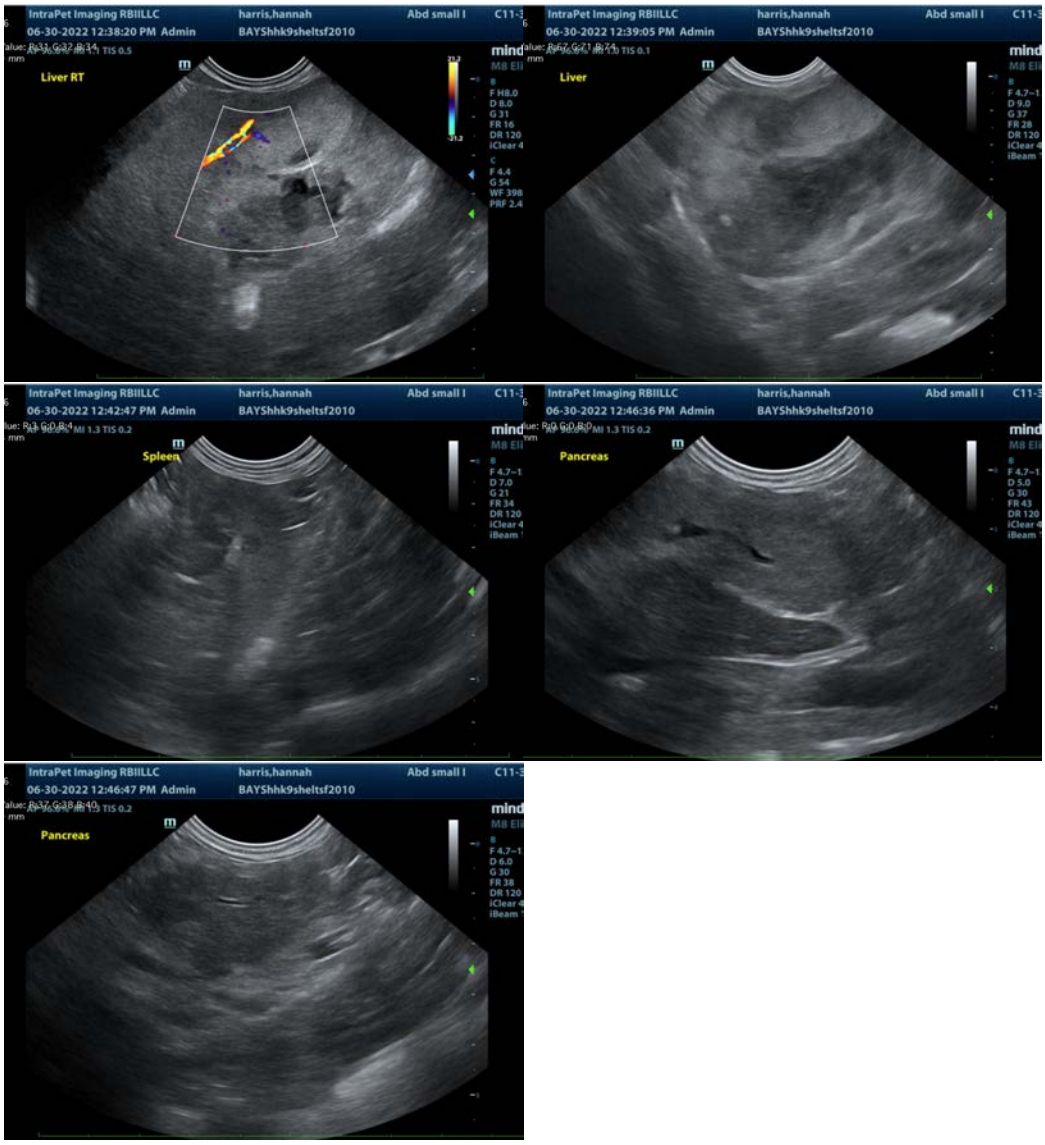
- Gallbladder debris - Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Three view thoracic radiographs are recommended for further assessment of cardio-pulmonary status as well as to further evaluate for any evidence of metastatic disease, if not recently evaluated.

- Fine needle aspirate of the liver mass could be considered to try to determine a cytologic diagnosis. However, given the strong risk of hemorrhage, surgical exploratory with excisional biopsy is recommended. The mass extends caudally all the way to the diaphragm, so full surgical resectability cannot be determined definitively. Therefore, a pre-surgical planning abdominal CT scan could be considered.





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.

Beth Johnson, DVM, DACVIM
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