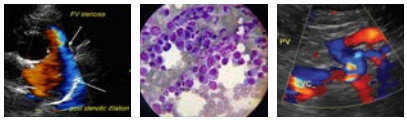
IMAGING PERFORMED BY

IntraPet.com



SonoPath

Clinical Sonography & Telecytology

EDUCATIONAL TELECONSULTATION SERVICES™

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DATE

6/8/22

PATIENT

Dallas Heise

SPECIES

Canine

BREED

Labrador X

SEX

Spayed Female

AGE

11/18/07

WEIGHT

35.4 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Stephanie Pearce RDCS, RVT

HOSPITAL NAME

Banfield Westminster

REFERRING VET

Dr. Stephens

INVOICE

38517

PRESENTING CLINICAL SIGNS

Dallas, a 14y 6m old FS Labrdor Retriever, is presented for V/D
P is not eating her food, will eat carrots and treats. P is throwing up each morning. O notes P has thrown up bile the last 4 out of 7 days, Drinking water, having normal bm, not lethargic.Hx of chronic hepatopathy, on long term Denamarin supplement.
Current Medications: Denamarin daily supplement for years
6/4/22 RX: Cerenia 60 mg: Give 0.5 tablet Q 24hrs for 4 days, Entyce 30 mg/ml: Give 1.6ml Q 24hrs for 4 days

Lab Results: Super Chem/CBC: ALKP H 1640 (normal 23-212, hx 592 most recently, today is highest recorded level), ALT H 369 (normal 10-125, hx of 289 most recently, highest recorded in 2018 at 749), CHOL H 399, GLOB H 6.2, TP H 8.7, Na H 162, HCT L 36.81 (normal 37-55, hx of 44.33 most recently, today lowest recorded), RBC low normal 5.69 (normal 5.5-8.5).
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not 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 (5.93 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. Pyelectasia noted (0.47 cm in the transverse view). There is no evidence of mineral or infarcts observed.

The left kidney is normal in size (4.2 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

Adrenal Glands

The right adrenal gland is enlarged (2.75 cm long x 1.55 cm at the cranial pole and 1.55 cm at the caudal pole), with mildly heterogeneous parenchymal changes and swollen capsular expansion without noted capsular escape and no visible vascular invasion. However, vascular invasion cannot be completely ruled out.

The left adrenal gland is normal in size (1.65 cm long x 0.30 cm at the cranial pole and 0.53 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 approximately 1.0 cm anechoic nodule was noted near the tail of the spleen, non-capsule disrupting. Splenic vasculature appears normal.

Liver

Liver is subjectively enlarged with rounded margins. Parenchyma is heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. An 8.0 cm x 4.0 cm heterogeneous mixed mass is noted in the deep right liver. Visible vasculature appears normal.

The gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

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 pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

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

No apparent pericardial effusion.

PRIMARY FINDINGS

- Mixed heterogeneous right liver mass – most concerning for infiltrative neoplasia such as a primary hepatocellular carcinoma, sarcoma, or less likely metastatic disease.

- Right adrenomegaly – most consistent with an adrenal adenoma. However, adenocarcinoma, pheochromocytoma, hyperplasia, etc. cannot be ruled out. Vascular invasion is not visible, but cannot be definitively ruled out.

SECONDARY FINDINGS

- Splenic nodule – most consistent with benign cyst or hematoma. A metastatic lesion cannot be ruled out, as they can mimic benign lesions. However, this is considered much less likely.

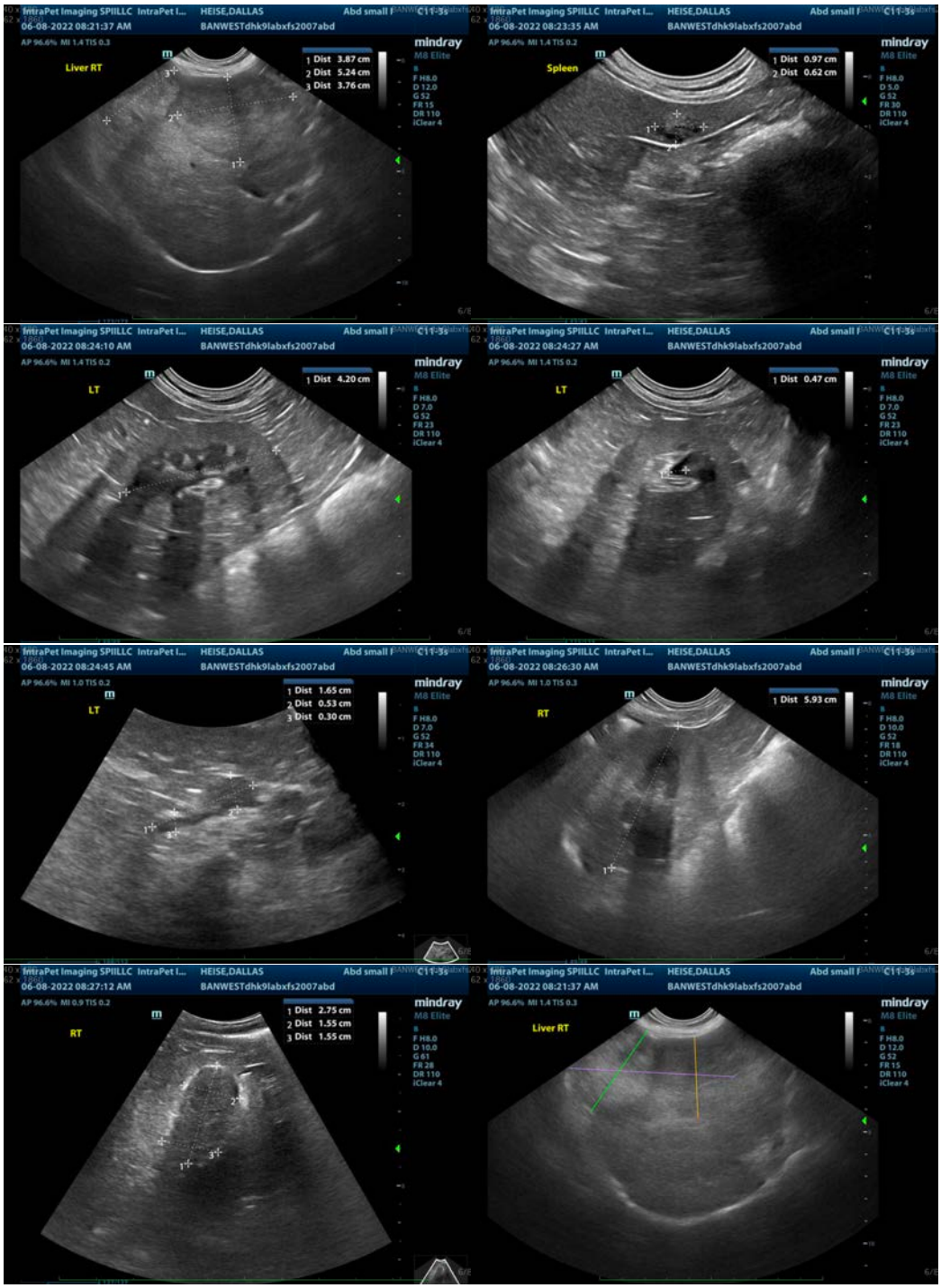
- Left kidney pyelectasia - Differentials for pyelectasia include pyelonephritis, diuresis, congenital malformation or ureteral or lower urinary tract obstruction.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The primary concerning lesion is the heterogeneous liver mass. Therefore, recommendations include:

- Thoracic radiographs for further evaluation of metastatic disease, if not recently evaluated.
- Fine needle aspirate of the liver mass if patient's coagulation status is appropriate.
- Ultimately, surgical excisional biopsy of the mass is recommended with a pre-surgical CT scan recommended for surgical planning as well as further evaluation of the right adrenal gland.

Pending management of the primary issue, which is the liver mass, future recommendations could be evaluation of possible hyperadrenocorticism, likely adrenal dependent, with a low-dose Dexamethasone suppression test, if clinical signs of hyperadrenocorticism are present, as well as blood pressure (if not recently evaluated) and urinalysis (if not recently evaluated) with culture and/or UPC if indicated, based on urinalysis results.



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
Beth.Johnson@sonopath.com