

**DATE PRESENTING CLINICAL SIGNS**

3/24/22 Pt presented for chronic orthopedic issues. Routine labs showed ALP increase to 1700.

PATIENT

Chance Confer

Current Medications: Carprofen 75mg BID, Gabapentin 200mg BID-TID.

Lab Results: ALP 1700, previous ALP 480 in September.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

SPECIES

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System****BREED**

Pit Bull

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.

SEX

Neutered Male

Prostate (neutered) is normal in size, echotexture and echogenicity for a neutered male.

AGE

8/1/10

The right kidney is normal in size (7.46 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.

WEIGHT

83 Pounds

The left kidney is normal in size (7.62 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.

INTERPRETED BY

Beth Johnson, DVM
DACVIM

Adrenal Glands

The right adrenal gland is distorted in shape and contour with lack of normal corticomedullary distinction caused by a heterogeneous mass measuring 3.3 cm x 2.5 cm. Invasion of the caudal vena cava is present.

The left adrenal gland is normal in size (2.67 cm long x 0.81 cm at the cranial pole and 0.98 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

IMAGING PERFORMED BY

Stephanie Pearce
RDCS, RVT

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). Several multifocal hypo- to anechoic nodules noted measuring just under 1.0 cm. Splenic vasculature appears normal.

HOSPITAL NAME

Everhart VH

Liver

Liver is subjectively enlarged with rounded margins. Parenchyma is heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. A focal, more concerning hypoechoic nodule/mass is noted in the mid left liver, measuring 2.5 cm in diameter and contains a hyperechoic center, concerning for a target lesion. Visible vasculature appears normal.

REFERRING VET

Dr. Menefee

INVOICE

36450

GB is moderately distended with anechoic bile and gravity dependent echogenic sediment. 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 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.

PRIMARY FINDINGS

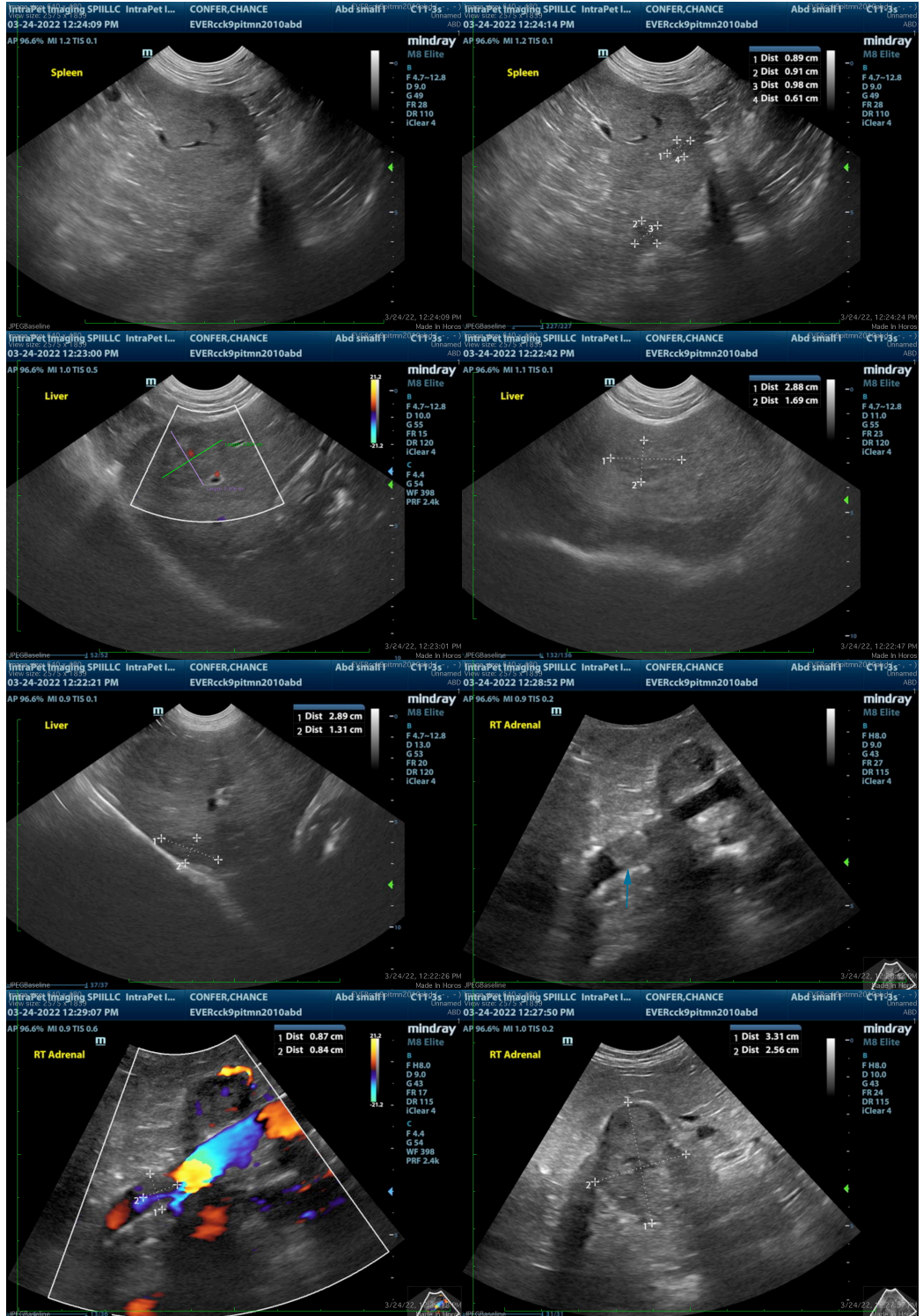
- Right adrenal mass with vascular invasion – most consistent with malignant adrenocortical neoplasia such as an adenocarcinoma. A benign adrenocortical tumor with concurrent vena caval thrombosis caused by the hypercoagulable state that functional adrenocortical tumors cause is possible, but considered less likely than a malignant tumor with caval invasion.
- Target lesion in the liver – Concerning for a metastatic lesion. Benign nodule is possible, but considered less likely.
- Hypo- to anechoic splenic nodules – Differentials include benign lesions such as cysts, hematomas, nodular hyperplasia, extramedullary hematopoiesis, etc. However, infiltrative neoplasia/metastatic disease can mimic benign lesions and cannot be ruled out, especially given the concurrent findings.

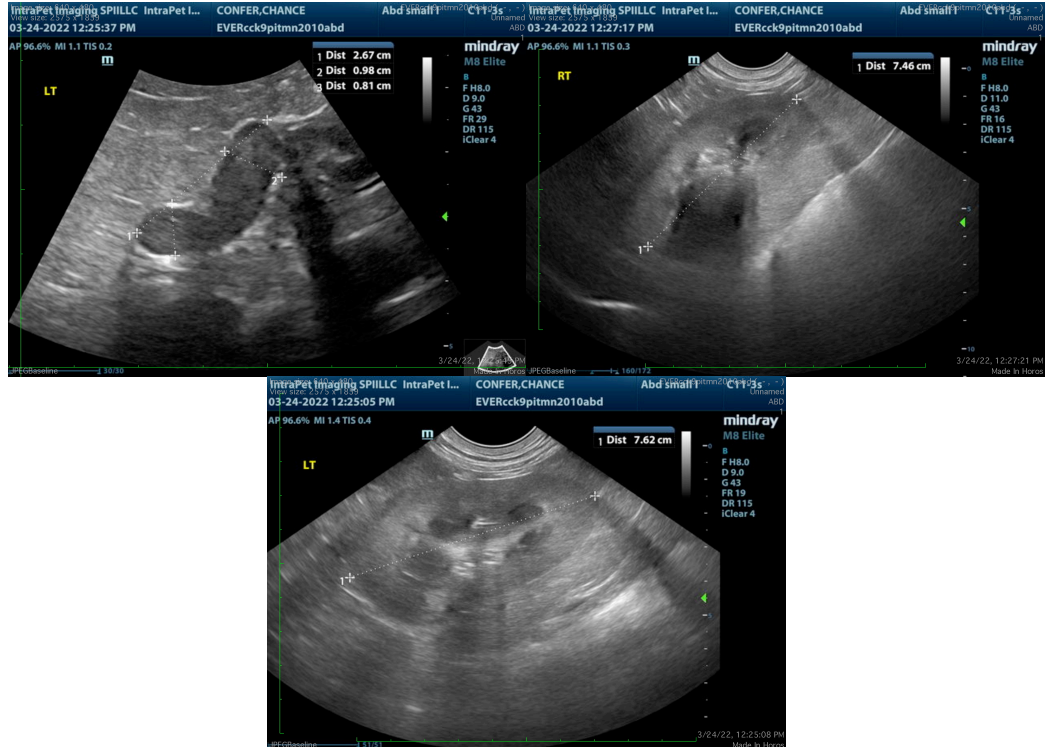
SECONDARY FINDINGS

- 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

Recommendations include 3-view thoracic radiographs for further evaluation of metastatic disease is not recently evaluated. A fine needle aspirate of the liver nodule and the spleen could be considered to further assess possible metastatic disease, if patient's coagulation status is appropriate. An abdominal CT scan could also be considered for further evaluation of the adrenal mass and caval thrombosis as well as the liver and splenic lesions for possible surgical planning, if an adrenalectomy given the possibility of concurrent metastatic disease. If surgery is not an option, and clinical signs of hyperadrenocorticism are present, additional hormone testing could be considered to help guide medical management.





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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