

**DATE PRESENTING CLINICAL SIGNS**

2/17/22

History: P has reverse sneezing, arthritis, and dental tartar. Otherwise, no significant clinical signs are present. We have been monitoring a mild increased ALKP, now also developing mild increased ALT. No v/d/anorexia. No history of PU/PD.

PATIENT

Izzy Lamond

Current Medications: Apoquel 16mg - 1/2 PO SID for years.
Lab Results: Attached separately. Increasing ALKP and ALT; otherwise, NSF.
Date of Previous IntraPet Ultrasound: No previous IntraPet scans.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

SPECIES

Canine

BREED

Puggle

SEX

Spayed Female

AGE

5/1/12

WEIGHT

35.3 Pounds

INTERPRETED BYBeth Johnson, DVM
DACVIM**IMAGING PERFORMED BY**

Rachel Brilhart RDMS

HOSPITAL NAME

Fullerton AH

REFERRING VET

Dr. Stock

INVOICE

35729

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 (5.35 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.

The left kidney is normal in size (5.01 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. A 0.8 cm cortical cyst is noted in the cranial pole of the left kidney.

Adrenal Glands

The right adrenal gland is normal in size (subjectively plump), measuring 2.33 cm long x 1.0 cm at the cranial pole and 1.06 cm at the caudal pole. Normal shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (2.72 cm long x 0.51 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.

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). A 2.0 cm primarily hypoechoic but mixed echogenic mass is present in the mid spleen, non-capsule disrupting. Splenic vasculature appears normal.

Liver

Liver is subjectively enlarged. Margins are smooth but round. It has a normal homogenous echotexture. Parenchyma is diffusely hyperechoic characterized by less prominent than normal portal vein walls and increased echogenicity relative to the spleen. A 3.5 cm, primarily hypoechoic mass is present in the deep right liver with a partially hyperechoic center. Visible vasculature and biliary tree appear normal without distension or congestion.

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 mildly distended with very echogenic reverberation artifact from intraluminal gas. There is no evidence of obstruction, foreign material or infiltrative disease; however, complete visualization of far wall is partially inhibited by gas. 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 pericardial effusion noted. On the thoracic edge of the diaphragm, there is a 2.0 cm hypoechoic structure of unknown origin.

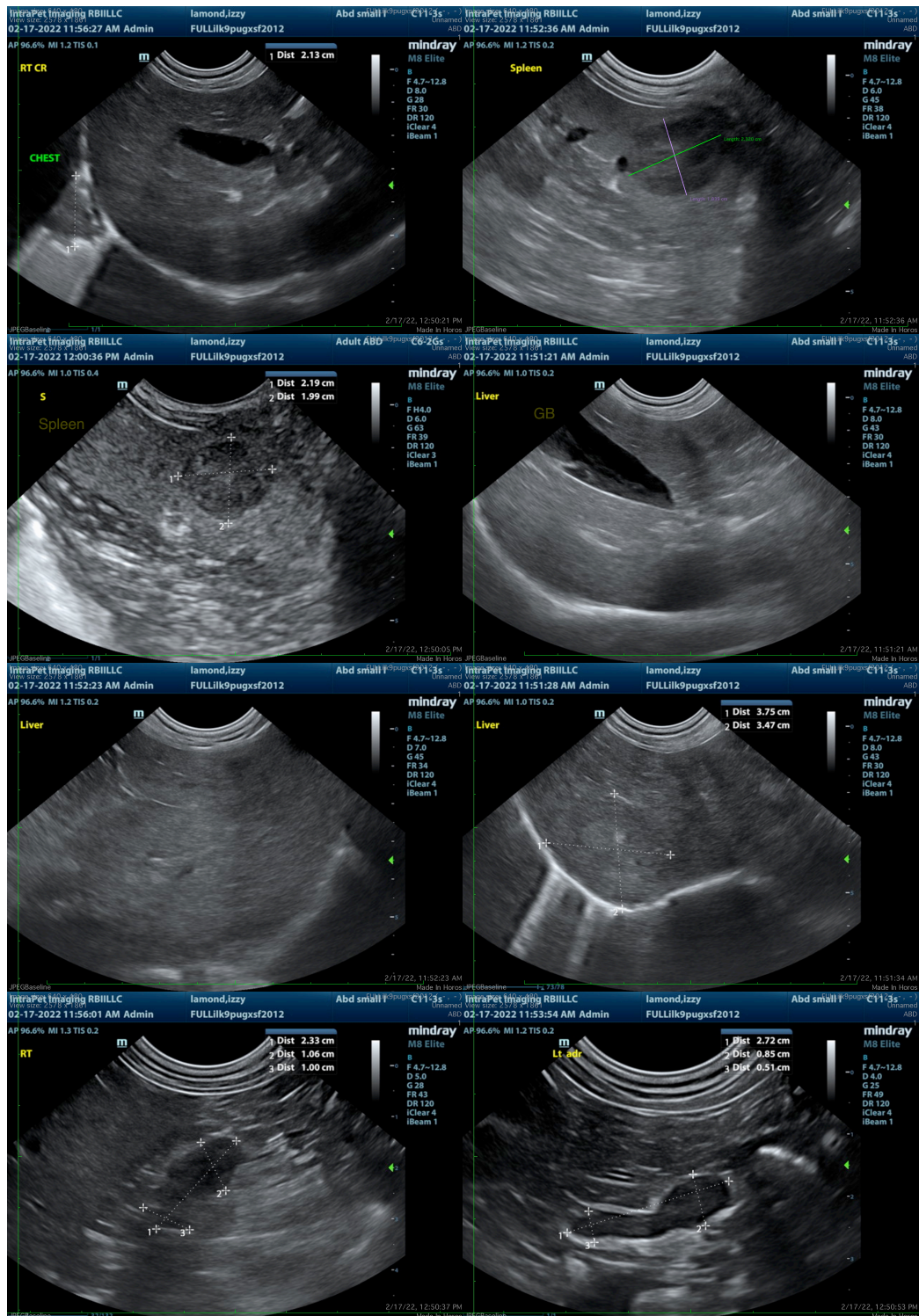
ULTRASONOGRAPHIC FINDINGS

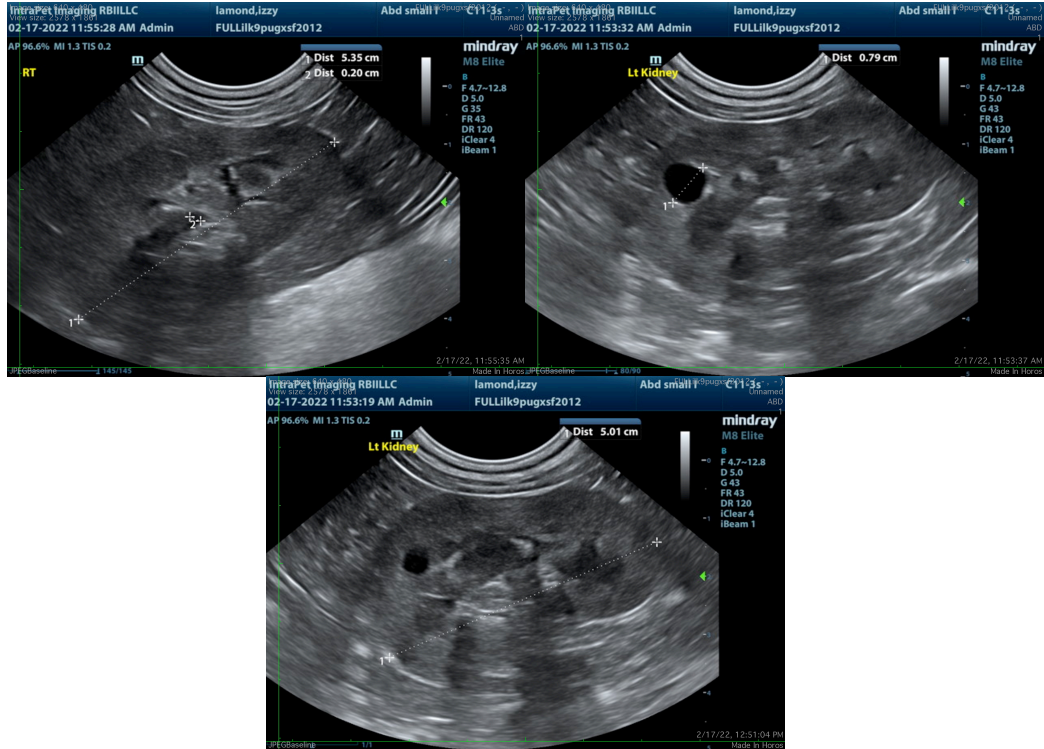
- Hyperechoic hepatomegaly with a discrete liver mass in the deep right liver – Differentials include both benign nodular hyperplasia as well as infiltrative neoplasia with primary hepatic neoplasia such as hepatocellular carcinoma versus round cell neoplasia considered the top neoplastic differentials.
- Mixed, non-capsule disrupting splenic mass – Differentials include a benign hematoma, nodular regeneration, or extramedullary hematopoiesis versus possible but less likely infiltrative neoplasia such as sarcoma or round cell neoplasia.
- Hypoechoic nodule/thoracic mass of unknown origin
- 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.
- Incidental left renal cortical cyst
- Subjectively plump right adrenal gland – Without supporting clinical signs of hyperadrenocorticism, this is likely an incidental finding.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Recommendations include a fine needle aspirate of the liver mass and the splenic mass if patient's coagulation status is appropriate. 3-view thoracic radiographs are also recommended for further assessment of the pulmonary structure noted in these images. If clinical signs of hyperadrenocorticism are present

and/or develop, a low-dose Dexamethasone suppression test could be considered. However, without clinical signs of hyperadrenocorticism, the increased Alk Phos is believed to be more likely secondary to the liver pathology described above.





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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