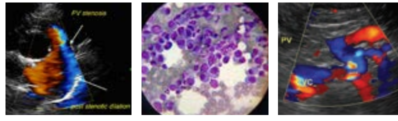


DATE

6/15/22

PATIENT

Belle Joy

SPECIES

Canine

BREED

Border Collie

SEX

Spayed Female

AGE

12/28/09

WEIGHT

45.4 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Rachel Brilhart RDMS

HOSPITAL NAME

Westminster VH

REFERRING VET

Dr. Hall

INVOICE

38735

PRESENTING CLINICAL SIGNS

Pet presented on 4/22/22 for routine senior exam. Owner reported previously noted masses left forelimb and right rear limb have grown. Past vet did cytology and masses were concluded to be lipomas. Owner does think that there is impingement on mobility of the left thoracic limb as a result of the mass there. Owner reported that patient was drinking more water then normal as well. Owner unsure if pet is urinating more frequently as a result. On PE pet was BAR and hydrated, mild lenticular
sclerosis OU; mild to moderate periodontal disease; Pet tense on abdominal palpation but no obvious abnormalities noted. Slight muscle atrophy appreciated in both hindlimbs. Bloodwork and radiographs were performed (see below). Based on these results, abdominal US was recommended

Current Medications: None. Gabapentin 200mg upon arrival.
Lab Results: 4/22/22: CBC: retic hemoglobin: 22.9pg (24.5-31.8); Platelets: 492K/uL(143-448); Chemistry: ALP: 273U/L (5-160); Lipase: 343U/L (0-250); CK: 420U/L (10-200); UA: SG: 1.024; occasional calcium oxalate dihydrate crystals
Radiographs: 4/22/22: Radiographs: Left forelimb/thoracic region and right hip region masses as clinically noted and described. The opacity of
the masses is inconsistent with lipomas. The pulmonary changes are mild and nonspecific. There is no evidence of pulmonary metastasis or
intrathoracic lymphadenopathy. Unremarkable abdomen. Unremarkable portions spine. Minimal degenerative changes hips.
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 urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

The left kidney has a normal shape and size (5.32 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 (5.92 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.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.65 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 and the echotexture is homogenous. The splenic capsule is smooth with no visible irregularities. Rare discrete focal hyperechoic, perivascular parenchymal abnormalities are present. The appearance of these lesions is most consistent with benign splenic myelolipomas. The blood flow through the hilus and splenic parenchyma appears normal.

Liver
The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

The gall bladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. There is a moderate amount of non-organized echogenic debris. 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. The pylorus and proximal duodenum appear slightly prominent, measuring 0.54 cm in thickness with retained wall layering.

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. The duodenum measured as normal (between 0.3-0.5cm in wall thickness) and the jejunum measured as normal (between 0.2-0.47cm.) 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 prominent and hypoechoic as compared to the surrounding isoechoic 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.

PRIMARY FINDINGS

- Hypoechoic, prominent pancreas – The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.

- Heterogeneous liver – The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy. This can also be consistent with age related change.

- Moderate gallbladder debris – The significance of the aggregated gallbladder sludge is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting.

SECONDARY FINDINGS

- Questionably prominent pylorus/proximal duodenum – The significance of this is unclear, but in some images the wall appears prominent and thickened with intact layering. Recommend continued monitoring for GI signs.

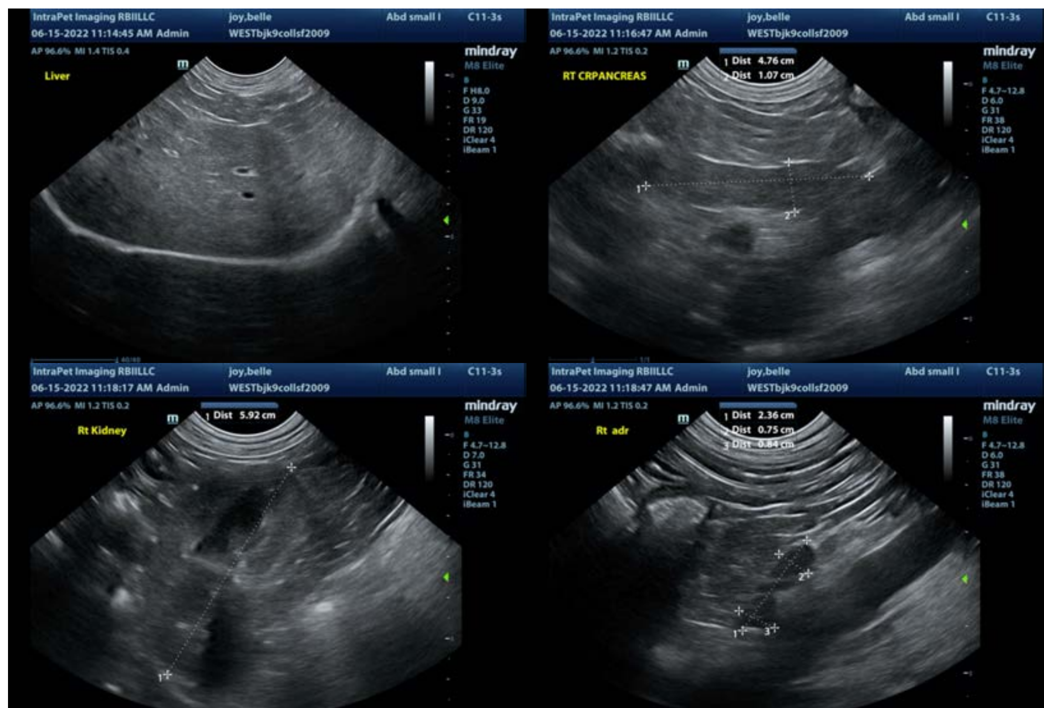
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

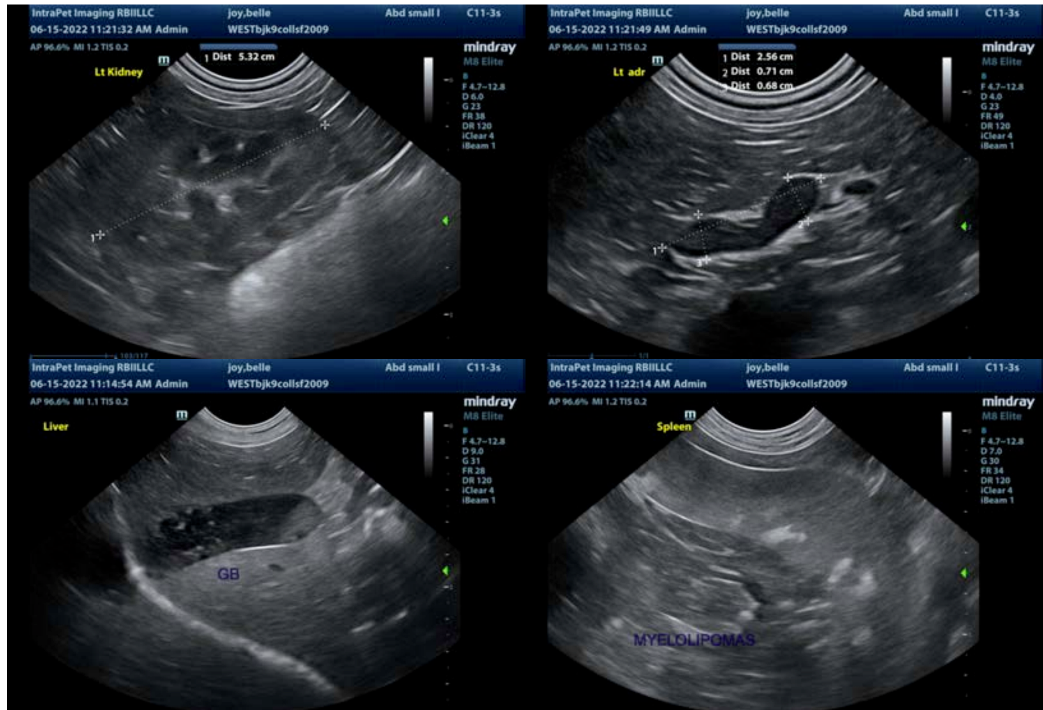
No obvious cause for the PU/PD reported is visualized. The adrenal glands appear relatively normal in size, and the liver has no focal lesions. There is moderate debris in the gallbladder. You could consider continued monitoring, or therapy with Ursodiol as a preventative measure.

The pancreas is somewhat prominent, but does not appear overtly inflamed. If there is no evidence of GI upset, then I would recommend continued monitoring or a quantitative PLI level.

If there is continued concern regarding possible PU/PD, then consider a urinalysis and culture, screening for Leptospirosis, a liver function test, and if signs of Cushing's are present, you could consider adrenal function testing.

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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