

**DATE PRESENTING CLINICAL SIGNS**

5/17/22 Pets annual screening lab work showed elevated Total Bilirubin, a lot of lipemia in the sample in spite of a 12 hour fast, a non concentrated urine sample after overnight without water access.

PATIENT

Guinness Lyons

Current Medications: Heartgard monthly. Trazodone 100mg evening before and 2 hours before vet visit. Lab Results: USG 1.018 (x2 and after overnight without water), a trace of hemolyzed blood in the urine. serology normal. thyroid would not run due to lipemia (after a 12 hour fast) WBC 4.66 (6-17), lym 1.03 (1-4.8), mono 0.25 (0.2-1.5) BUN 14.2, crea 1.0, alb 3.1, glob 4.6, alt 69, alk 42, ggt 0, T bili 0.6 (0-0.4), chol 262, lipa 70, amy 1115

SPECIES

Canine

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Full sedation.

Stat Report: Not requested.

BREED

Australian Cattle Dog

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**SEX**

Neutered Male

Urinary System

The urinary bladder is mildly 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.

AGE

4/20/12

The prostate is normal in size (1.27 cm) and shape for this neutered male dog. The parenchyma is homogenous and the external margins are smooth. The prostatic urethra appears normal with no evidence of irregularity, invasion, mass effect or calculi.

WEIGHT

47 Pounds

The left kidney has a normal shape and size (5.58 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.

INTERPRETED BY

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

The right kidney has a normal shape and size (6.18 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.

IMAGING PERFORMED BY

Rachel Brilhart RDMS

Adrenal Glands

The left adrenal gland is normal in size measuring 0.80 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.

HOSPITAL NAME

Friendly Paws VC

The right adrenal gland is normal in size measuring 0.67 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.

REFERRING VET

Dr. Price

Spleen

The spleen is subjectively normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

INVOICE

37682

Liver

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is homogenous echotexture. The visible portions of the vasculature and biliary tract appear normal. There is a large cystic lesion visualized deep on the right side of the liver measuring 3.12 cm x 2.2 cm.

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are primarily anechoic. 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. No masses or focal lesions were observed.

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 mottled 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.

ULTRASONOGRAPHIC FINDINGS

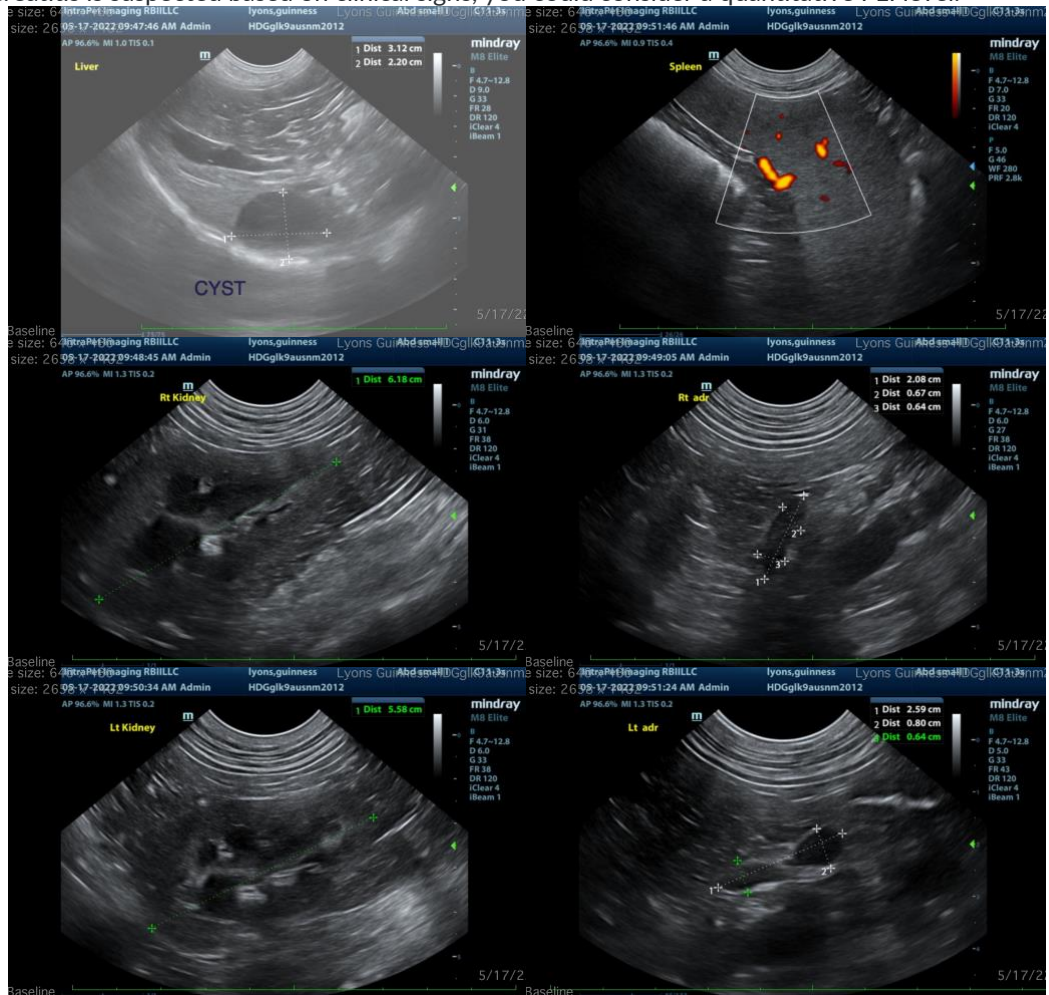
- Prominent, mottled pancreas – The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.
- Cystic lesion observed in the liver – This likely represents a benign cystic lesion. Recommend continued monitoring.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Today's scan is largely within normal limits for a 10 year old dog. The pancreas is slightly prominent, but there is no associated inflammation. These changes are most likely consistent with previous episodes of pancreatitis, although mild inflammation cannot be ruled out.

The bilirubin elevation reported is likely secondary to the lipemia reported and hemolysis, resulting in this artifactual elevation in bilirubin. Reevaluation of bilirubin levels without any lipemia or hemolysis will help to determine if this is a real finding. Recommend a fasted sample and evaluation of cholesterol and triglyceride levels. If these are significantly elevated, clinical hyperlipidemia may be present, and therapy may be indicated. The initial step is always an ultra low-fat diet. Royal Canin gastrointestinal low-fat is typically my favorite. If this does not control cholesterol and triglyceride levels, then medical intervention may be recommended.

If pancreatitis is suspected based on clinical signs, you could consider a quantitative PLI level.



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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)
kathleen.sennello@sonopath.com