**PATIENT**

El Loewen

PRESENTING CLINICAL SIGNS

History: Weight loss, renal disease, hypoalbuminemia, borderline UPC

Abnormal PE/Chem/CBC/UA Results: Weight loss Please see attached labs

SPECIES

Canine

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.

BREED

Lhasa Apso

The left kidney has a normal shape and size at 4.08 cm. Overall echogenicity is normal with decreased corticomedullary distinction with mild pyelectasia at 0.31 cm. There is no evidence of perinephric inflammation or effusion. There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

SEX

MN

The right kidney has a normal shape and size at 4.47 cm. Overall echogenicity is normal with decreased corticomedullary distinction and mild pyelectasia at 0.18 cm. There is no evidence of perinephric inflammation or effusion. There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

AGE

12 years

The prostate is normal in size (1.05 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

14.8 lbs

Adrenal Glands

The left adrenal gland is normal in size measuring 0.7 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.

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

The right adrenal gland is normal in size measuring 0.69 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.

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Amy Mayhew LVT

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.

HOSPITAL NAMESVS Imaging
Michigan**Liver**

The liver is subjectively normal/borderline small in size, and echogenicity with smooth peripheral margins. The parenchyma is homogenous echotexture. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

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Veterinary Hospital

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.

INVOICE
10715ag**Gastrointestinal**

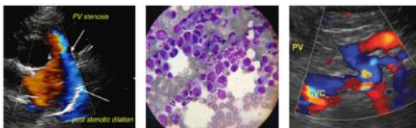
The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

DATE

06/02/2022

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svsimagingmi@gmail.com



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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 (0.39 cm) and the jejunum measured as normal (0.32 cm.) 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 normal and isoechoic to surrounding 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

- Decreased corticomedullary distinction in both kidneys with mild bilateral pyelectasia. Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis.
- Moderate gallbladder debris. The significance of the aggregated gallbladder debris is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting.
- Borderline small liver. This could be within normal limits for this individual but recommend liver function testing to look for evidence of a shunt, decreased function etc.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The lesions observed on today's scan are relatively mild. There is evidence of chronic renal disease (likely age related), BP, UA and urine C/S are recommended. The UPC reported is relatively mild and unlikely to be a source of the hypoalbuminemia reported.

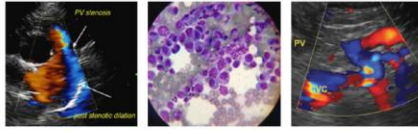
Other considerations for a low ALB would be a protein losing enteropathy or abnormal liver function. The small intestine appeared relatively normal on today's scan but not all types of intestinal disease can be diagnosed by ultrasound. Consider a GI panel to Texas A&M for a qualitative PLI/TLI/Cobalamin/Folate to evaluate for pancreatic and small intestinal disease.

Recommend a liver function test to look for evidence of decreased function. The liver subjectively appeared somewhat small but no focal lesions were observed. If bile acids are significantly elevated then a liver biopsy could be considered. A portosystemic shunt seems unlikely in an older pet but a congenital or acquired shunt cannot be completely excluded based on ultrasound alone (may require contrast CT).

Consider three view thoracic radiographs to rule out concurrent thoracic disease/involvement.

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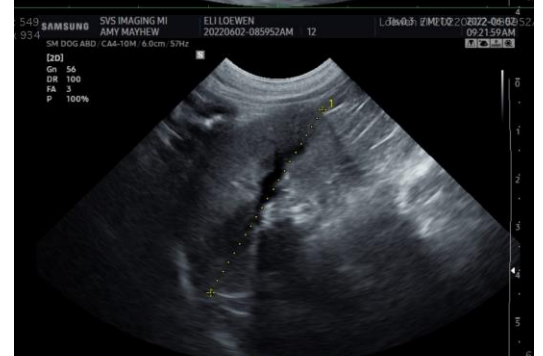
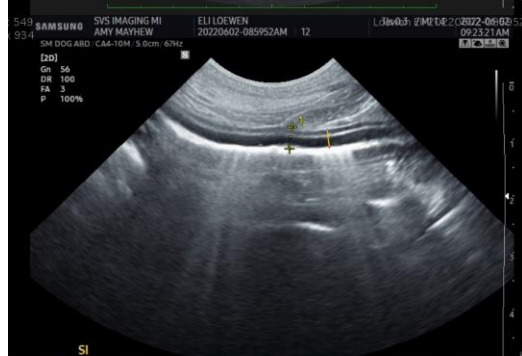
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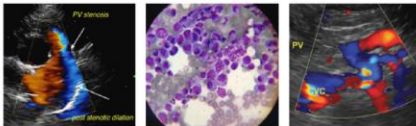
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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