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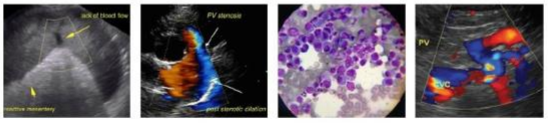


IMAGING PERFORMED BY
pawsonography@gmail.com 530-786-8340

PATIENT

Sampson Sampson

SPECIES

Canine

BREED

Boston Terrier

SEX

Neutered Male

AGE

11 Years

WEIGHT

25.8 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Loetitia Saint-Jacques, RVT

HOSPITAL NAME

AMC of Reno

REFERRING VET

Dr. Eryn Taormina

INVOICE

14199

DATE

11.5.21

PRESENTING CLINICAL SIGNS

History: P is presented today for an abd u/s to mostly assess newly dx'd HAC (dx'd at previous clinic) and evaluate the liver as well, as has had elevated liver enzymes (see attached labs) Has had hx of pancreatitis as well, but has been doing well lately Physical exam findings: P is BAR on exam NSF on exam Grade 1-2 dental disease. Has a mild heart murmur as well - grade 2. Abnormal CBC Values: attached Abnormal Chemistry Values: attached Abnormal UA Values: attached Radiograph Findings: n/a Reason for Ultrasound: Assess adrenals, liver, pancreas and rest of abd

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 2.0 cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

The prostate is normal in size (0.96 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.

The left kidney has a normal shape and size (5.29 cm). Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. A cortical cyst is present. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (5.35 cm). Overall echogenicity is slightly hyperechoic with poor 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 0.67 cm. 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.

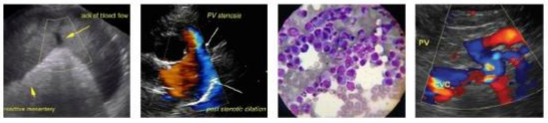
The right adrenal gland is normal in size measuring 0.64 cm. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

Spleen

The spleen is subjectively normal in size, 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.

Liver

The liver is subjectively large 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



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The gall bladder 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 is moderately dilated with fluid and irregular shadowing material most consistent with moderate ingesta and gas. 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 layering 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 (0.43 cm) and the jejunum measured as normal (0.3 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 moderately 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 lymphadenomegally 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

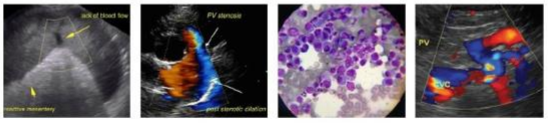
Primary Findings

- Large heterogenous liver
- Prominent mottled pancreas- The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.

Secondary Findings

- Mildly decreased corticomedullary distinction in both kidneys- The bilateral renal findings are consistent with age-related change.
- Moderate gastric dilation with ingesta- Correlate with feeding history if adequately fasted. Then consider such differentials as delayed gastric emptying or partial gastric obstruction (none observed).

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS



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No focal lesions are observed involving the liver or gallbladder. Liver function was normal based on the bile acids reported. This is how I approach a primary ALP elevation.

An elevation in ALP is a common finding. In general, however, causes of ALP elevation fall into three primary categories:

Induction phenomena, biliary diseases, and primary liver disorders.

- Induction phenomena are the most common cause for an elevated ALP. These are systemic illnesses that 'turn on' the liver enzyme. Causes of this include Cushing's disease, dental disease, arthritis, and numerous others. In many cases the exact cause is unclear but as long as ultrasound and bile acids tests are normal most patients do not have progressive changes in their liver. While liver biopsy is not routinely performed, vacuolar hepatopathy, is noted on most biopsies. This is often non-progressive but in rare cases can be more severe and lead to liver failure.

- If signs of cushings disease are present recommend endocrine function testing to evaluate for cushings disease.

- Consider fine needle aspirate to rule out round cell neoplasia if this is a concern.

- If a cause for the ALP elevation is not identified: I recommend recheck general blood work every 6 months, ultrasound once per year, and bile acids test every 1-2 years based on other results. If the ALP continues to climb a biopsy could be considered.

- Consider long term use of denamarin, and monitoring for the signs of cushings developing.

- A primary vacuolar hepatopathy can be breed related and is seen in Scottish Terriers, Schnauzers, Cocker spaniels etc.

Additionally, the pancreas is prominent, this could be consistent with current pancreatitis or resolving previous pancreatitis. You could consider quantitative PLI, TLI, cobalamin and folate (GI panel from Texas A & M University) to further evaluate the pancreas and small intestine. A low-fat diet is recommended.

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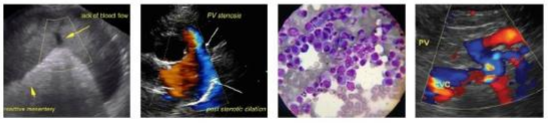

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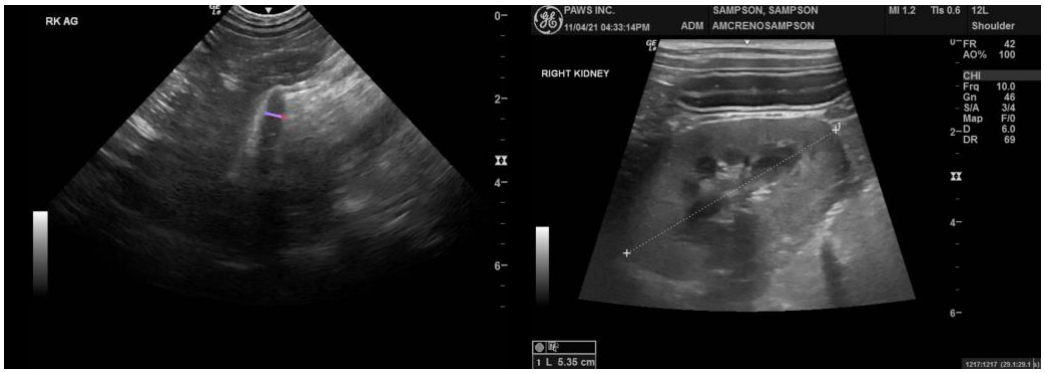
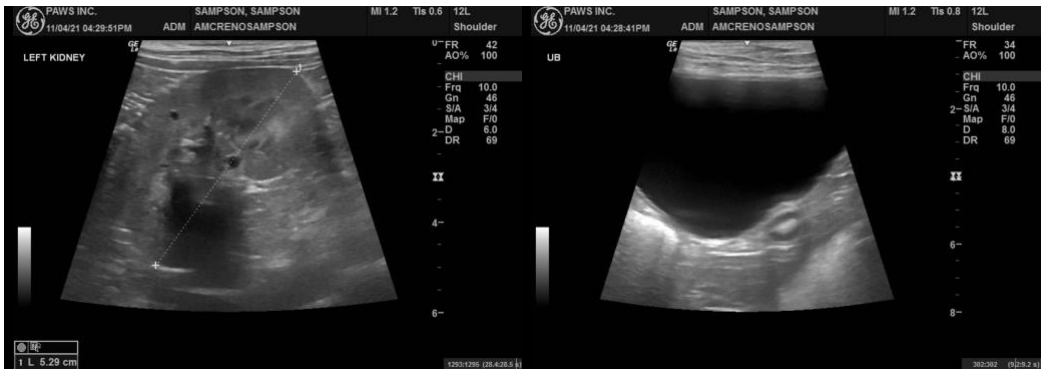
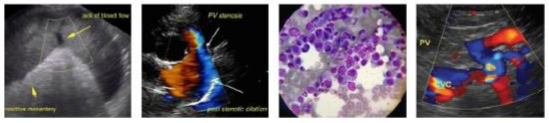




The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not



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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