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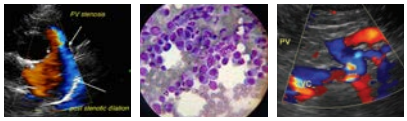
IntraPet.com



SonoPath

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DATE

12/21/22

PATIENT

Gizmo Adams

SPECIES

Canine

BREED

French Bulldog

SEX

Intact Male

AGE

2/2/21

WEIGHT

17.4 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Andi Parkinson RDMS

HOSPITAL NAME

Northwind AH

REFERRING VET

Dr. Wilson

INVOICE

43623

PRESENTING CLINICAL SIGNS

Presented for recheck from RDVM for chronic diarrhea and wt. loss. RDVM ran GI parasite PCR panel which came back negative and lab work which revealed a significant increase in ALT. P was treated with carafate and denamarin and baytril for 10 days. Weighed 24.9lb @ the time (11/11/22) on 11/27 Weighed 21lb and owner reported stools still loose and weight loss. Chem 10 revealed mild improvement in ALT. Rx metronidazole and clavamox. Owner recheck on 12/16/22, patient weighed 17.4lb, owner states patient polyphagic with loose stool and continued weight loss.

Current Medications: 11/28/22 metronidazole 2150mg, clavamox 125mg. 11/11/22 RDVM baytril 68mg, Carafate 1g, Denamarin in medium
Lab Results: 11/11/22 ALT 865 AGT 289 Glucose 59. 11/28/22 ALT 506. Bile acid...pending 12/21/22
Radiographs: 11/11/22- small opacity in abdomen, piece of concrete?
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 prostate is large in size (0.94 cm) but has a regular shape with smooth external margins. The parenchyma is heterogenous but no discrete focal lesions are present. The prostatic urethra appears normal with no evidence of irregularity, invasion, mass effect or calculi.

The left kidney has a normal shape and size (4.45 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal 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 (4.68 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal 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/borderline “flat”, measuring 0.37 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/borderline “flat”, measuring 0.35 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, 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 is normal/borderline small with normal echogenicity and 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.

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are mild and primarily anechoic. The cystic and common bile ducts are normal/not visible.

Gastrointestinal
The stomach contains large shadowing ingesta. 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. Much of the material within the stomach is consistent with ingesta, gas, fluid, etc. There is some hard shadowing material also visualized, consistent with possible ingestion of foreign material.

The visualized areas of duodenum, jejunum and ileum have a uniform diameter with mild to moderate fluid distension. Wall thickness is moderately increased. Bowel loops follow a typical curvilinear path. Some areas have reduced detail of wall layering. Duodenum wall measures 0.41 cm. Jejunum wall measures 0.37 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 non-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
There is a moderate amount of anechoic free fluid. No lymphadenopathy is noted. The omentum is mildly hyperechoic.

ULTRASONOGRAPHIC FINDINGS

- Diffusely mildly thickened small intestine with areas of fluid distention – The bowel wall thickening could be consistent with inflammation, edema, or infiltrative neoplasia.
- Borderline “flat” adrenal glands – Recommend screening for Addison’s disease.
- Borderline small liver – The parenchyma of the liver generally appears normal, but full evaluation is somewhat limited due to the large amount of shadowing material within the stomach and artifact from the small intestine.
- Large amount of shadowing material within the gastric lumen – Much of this material appears consistent with normal ingesta/gas/fluid, etc., but there is some hard shadowing material that could be consistent with ingested foreign material.
- Mild to moderate amount of free abdominal fluid

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

On initial evaluation, I am primarily concerned with thickened, intermittently fluid dilated small bowel and the free fluid evident. These findings would commonly be most consistent with malabsorptive disease, a protein losing enteropathy, etc., but with the normal albumin levels submitted, this is questionable. Consider rechecking current albumin levels in light of the free abdominal fluid present. Also consider sampling of the free abdominal fluid to try and determine if it is transudate, modified transudate, etc. Consider screening for Addison's disease, and additionally I would recommend a GI panel to Texas A&M for a qualitative cPLI, TLI, cobalamin and folate, looking for evidence of underlying small intestinal disease, exocrine pancreatic insufficiency, etc.

In some views, the liver looks subjectively mildly decreased in size, although this could be normal for this individual. A portosystemic shunt would be a possible differential, but given the normal bile acids, this becomes much less likely. Full evaluation for a shunt with ultrasound was not possible due to the large amount of fluid and ingesta in the gastrointestinal tract today. A contrast CT scan may be needed if further evaluation is desired.

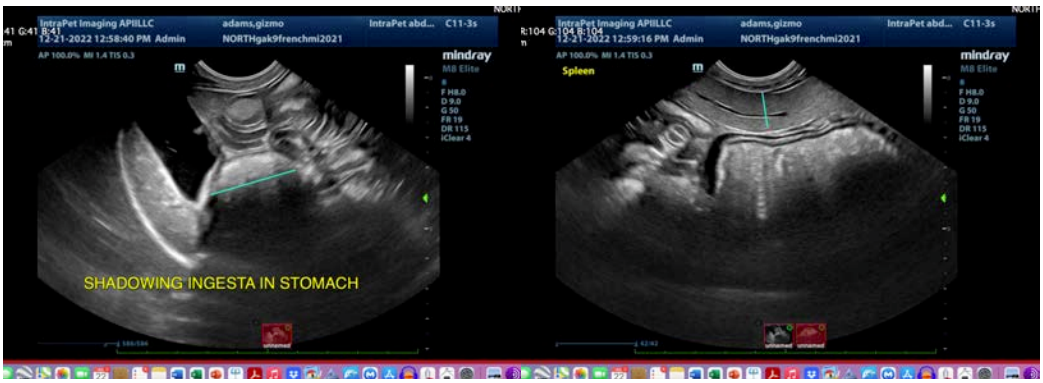
Given the significant liver enzyme elevations, consider screening for Leptospirosis and evaluating for any possible toxin exposure. If liver enzyme elevations persist, a biopsy may be necessary, although it is unusual that the liver test was normal.

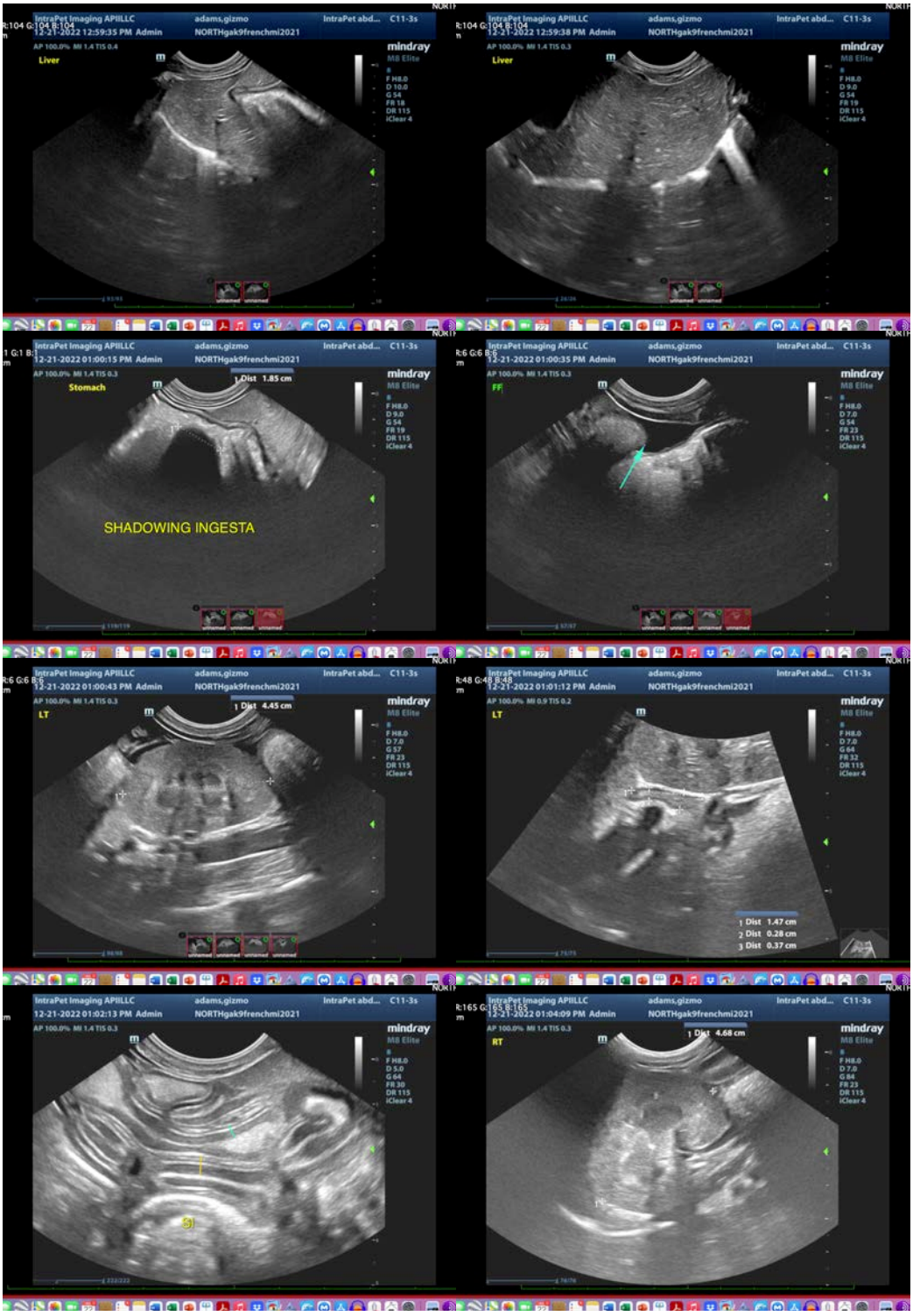
Recommend 3-view thoracic radiographs, and if albumin levels are normal and a modified transudate is present, you could consider evaluation of the heart for pericardial effusion, right-sided heart disease, etc. In the meantime, I would consider:

- An ultra-low-fat or hydrolyzed protein prescription diet.
- Chronic probiotic therapy.
- I would discontinue broad-spectrum antibiotics, as an infectious problem seems unlikely, and this may be causing dysbiosis.

The fluid distention of the small bowel and stomach are most consistent with generalized ileus and ingested foreign material. No obstruction is noted but a partial obstruction cannot be definitively ruled out. Referral for a veterinary internist may be helpful, as the current findings are not creating a clear picture of what is going on.

***The attached Bile acids were reviewed and interpreted as "normal". The mild increase in Pre- bile acids is likely incidental- possibly due to early gall bladder contraction etc..

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Stomach
Dist 1.85 cm
SHADOWING INGESTA
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FF
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LT
Dist 4.45 cm
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LT
Dist 1.47 cm
Dist 0.28 cm
Dist 0.37 cm
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RT
Dist 4.68 cm

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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