

**DATE PRESENTING CLINICAL SIGNS**

4/10/23
PATIENT History: Pre op bloodwork for planning oral cavity mass removal. Showed Albumin 2.9, Globulin 2.9/ 2019 Alb 3.6, Glob 3.4. Normal bloodwork 2020. Lost a little weight. Normal appetite, water intake, urination, defecation, acting normal per O.

Pumpkin Allman

Current Medications: None listed.

SPECIES

Lab Results: 3/23/23 CBC WNL. Alb 2.9, Glob 2.9, BUN 12, Creat 0.8, SDMA 12.9, ALT 19. 3/25/23 USG 1.020, protein negative. Bile acid pre 2.4, post 1.7 normal. 4/6/23 recheck bloodwork HCT 50%, Ab 2.6, Glob 2.9

Canine

Date of Previous IntraPet Ultrasound: No previous.

BREED

Sedation: Not required to complete full diagnostic ultrasound.

Golden Retriever

Stat Report: Not requested.

Imaging Performed By: Rachel Brillhart, RDMS.

SEX**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

Spayed Female

Urinary System

Urinary bladder is adequately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

AGE

12/18/12

Left kidney is normal is size (6.44 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

WEIGHT

77 Pounds

Right kidney is normal is size (6.86 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

INTERPRETED BYBeth Johnson, DVM
DACVIM**Adrenal Glands**

Left adrenal gland is normal in size (2.95 cm long x 0.77 cm at cranial pole and 0.72 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

HOSPITAL NAME

Jacksonville VH

Right adrenal gland is normal in size (3.18 cm long x 0.9 cm at cranial pole and 0.86 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

REFERRING VET

Dr. Burk

Spleen

Spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

INVOICE

21937

Liver

Liver is relatively normal in size and contour. Parenchyma is mildly heterogenous and coarse with mild likely age-related parenchymal remodeling noted. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

Gastrointestinal

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is moderately distended with both echogenic nonshadowing luminal contents and gas consistent with normal ingesta, as well as some curvilinear echogenic densities that do have acoustic shadow, as well as one focal discrete round hypo- to anechoic intraluminal structure. There is no evidence of obstruction or infiltrative disease, however, a nonobstructive foreign object/objects are possible.

The visible small intestines are normal in wall thickness and layering. Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

The visible colon is normal in wall thickness and layering. Contents are consistent with normal formed feces and gas.

Pancreas

The observed pancreas appears appropriately isoechoic to surrounding omental fat. Visible capsule is smooth and normal in contour. Visible pancreatic parenchyma is homogenous and unremarkable. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

There is no evidence of peritoneal effusion. The mesenteric lymph nodes are prominent in size with swollen capsular contour. Normal elongated shape (length to width ratio) is maintained. There is no loss of parenchymal detail.

ULTRASONOGRAPHIC FINDINGS

- A full stomach that contains suspect foreign objects, however, the objects described may just be the reported ham bone that was ingested vs other toys, sticks, etc. Having said that, additional foreign material cannot be ruled out.
- Reactive mesenteric lymph nodes – infiltrative neoplastic disease cannot be ruled out but is considered less likely.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Given this patient's reported hypoalbuminemia and weight loss, further evaluation of digestion and absorption is recommended to begin working up possible protein losing enteropathy, beginning with a gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function. Additionally, a baseline cortisol is recommended. If baseline cortisol is less than 2, a full ACTH stimulation test is recommended to rule out hypoadrenocorticism.

If a protein losing enteropathy is suspected or diagnosed, ideally, biopsies of the GI tract would be pursued to definitively diagnose, and therefore, manage any underlying infiltrative process.

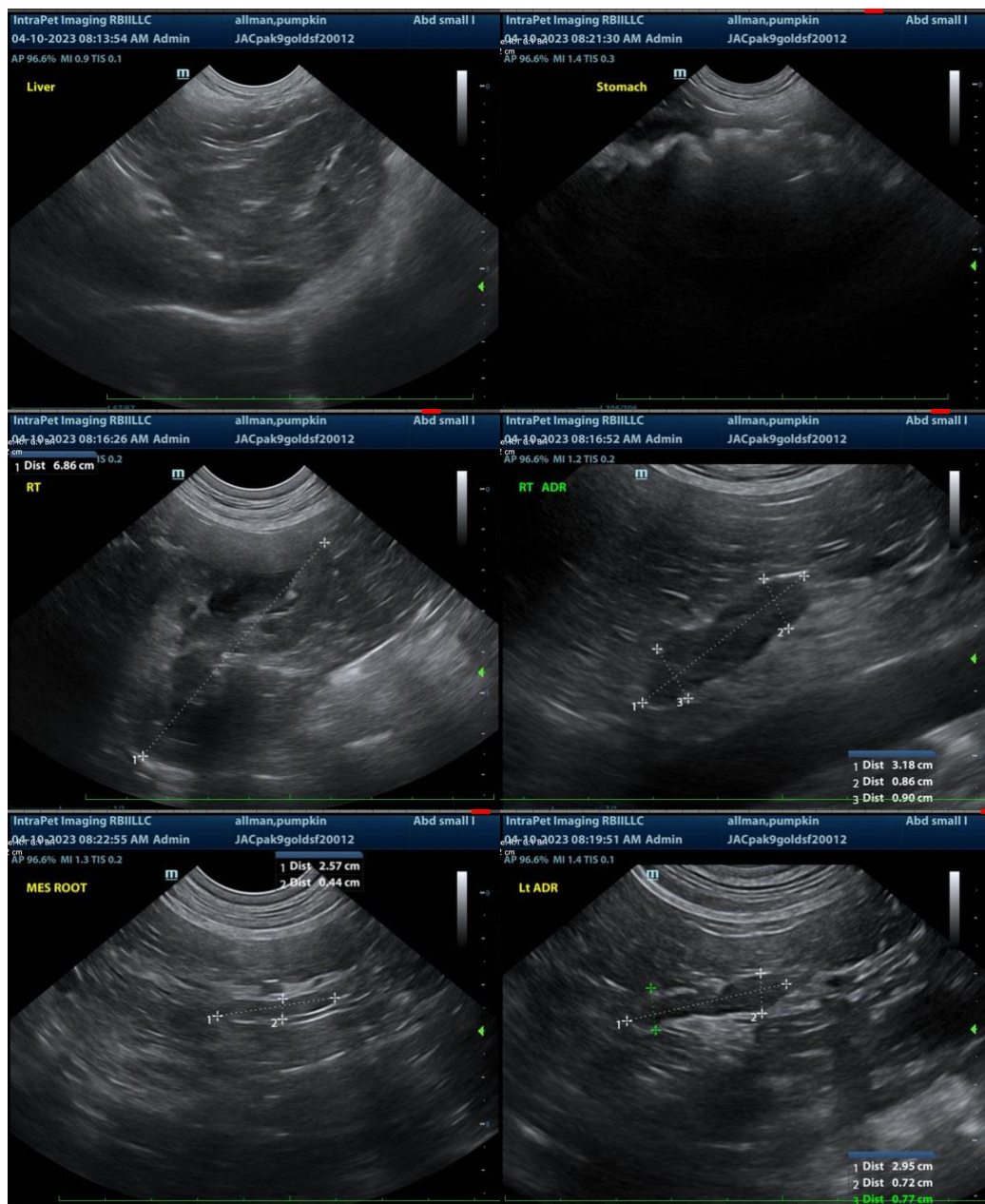
In the meantime, empirical therapies could include diet change to an ultra-low-fat diet, empirical deworming with a 5-day course of Panacur, and cobalamin supplementation, unless not indicated based on gastrointestinal panel results.

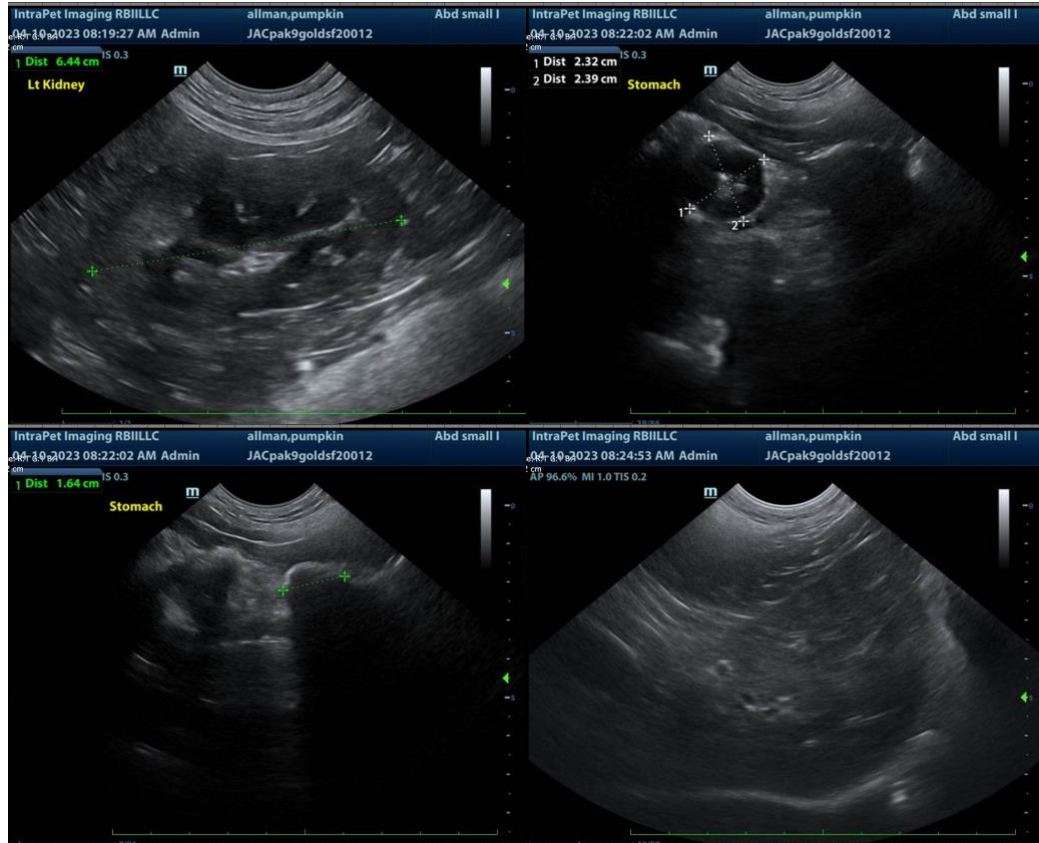
Additionally, if diarrhea is present, a probiotic such as Visbiome or Provable could be considered.

Calcium monitoring and supplementation, if necessary, is also recommended.

The gastric contents may be consistent with this patient's recent meal and ham bone ingestion, and therefore, recommendations at this time include close monitoring for any development of clinical signs, such as vomiting.

Alternatively, or additionally, 12-24 more hours of fasting could be initiated with recheck imaging of the gastrointestinal tract at that time.





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 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.

Beth Johnson, DVM DACVIM
Beth.Johnson@SonoPath.com