



<b>DATE</b>	<b>PRESENTING CLINICAL SIGNS</b>
10/17/22	History: Highly elevated ALP: concerned about Cushing's or other issue. Need to anesthetize pet to remove an ulcerated skin tumor.
<b>PATIENT</b>	
Aspen Ferris	Current Medications: N/A. Lab Results: 9/16/22: CBC WNL, IOF ALP 3293 (23-212), ALT 281 (10-125), other values WNL Date of Previous IntraPet Ultrasound: No previous.
<b>SPECIES</b>	Sedation: Not required to complete full diagnostic ultrasound. Stat Report: Not requested.
Canine	Imaging Performed By: Stephanie Warga RDCS, RVT.
<b>BREED</b>	
Husky	<b>ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN</b>
<b>SEX</b>	<b>Urinary System</b>
Neutered Male	Urinary bladder is only mildly distended (empty). Visible contents are anechoic. Urinary bladder wall is unable to be fully assessed for pathology without further distension. No visible masses or cystoliths are observed. The trigone and visible pelvic urethra are normal thickness with a smooth mucosal surface. If there are urinary signs and/or concern for urinary bladder pathology, reassessment after complete filling is recommended.
<b>AGE</b>	
10/18/12	The prostate is normal in size and echogenicity for a neutered male but has a slightly heterogenous coarse echotexture, likely normal aging variant, however, chronic prostatitis cannot be definitively ruled out.
<b>WEIGHT</b>	
23 kg	Left kidney is normal in size (6.31 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.
<b>INTERPRETED BY</b>	
Beth Johnson, DVM DACVIM	Right kidney is normal in size (6.43 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.
<b>HOSPITAL NAME</b>	<b>Adrenal Glands</b>
Banfield Columbia	Left adrenal gland is normal in size (2.9 cm long x 0.71 cm at cranial pole and 0.79 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal. Right adrenal gland is normal in size (2.1 cm long x 0.74 cm at cranial pole and 0.6 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.
<b>REFERRING VET</b>	<b>Spleen</b>
Dr. Landon	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.
<b>INVOICE</b>	<b>Liver</b>
17786	Liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. A 6.0 + cm x 7.0 + cm slightly heterogenous, primarily solid iso- to slightly hypoechoic mass noted in the mid caudal liver. 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 mildly distended with very echogenic reverberation artifact from intraluminal gas. There is no evidence of obstruction, foreign material or infiltrative disease; however, complete visualization of far wall is partially inhibited by gas. Pyloric outflow tract appears patent.

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 mildly thick, measuring between 0.35 cm and 0.4 cm thick with normal intact layering present.

### ***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. There is no apparent lymphadenopathy.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings**

- Mildly heterogenous iso- to hypoechoic liver mass, differentials for which include both benign infiltrative primary hepatic neoplasia, such as a hepatoma/adenoma, as well as malignant well differentiated hepatocellular carcinoma versus other neoplasia, including round cell neoplasia, etc. Marked nodular hyperplasia, granuloma, other, are possible but considered less likely.
- Mildly thick colon with intact layering may be normal variant but could be suggestive of colitis, perhaps secondary to parasitic or infectious disease. Infiltrative neoplasia is possible but considered less likely.

### **Secondary Findings**

- Mildly heterogenous prostate, likely normal aging change. Chronic prostatitis cannot be ruled out and this finding should be interpreted in combination with clinical signs, etc.

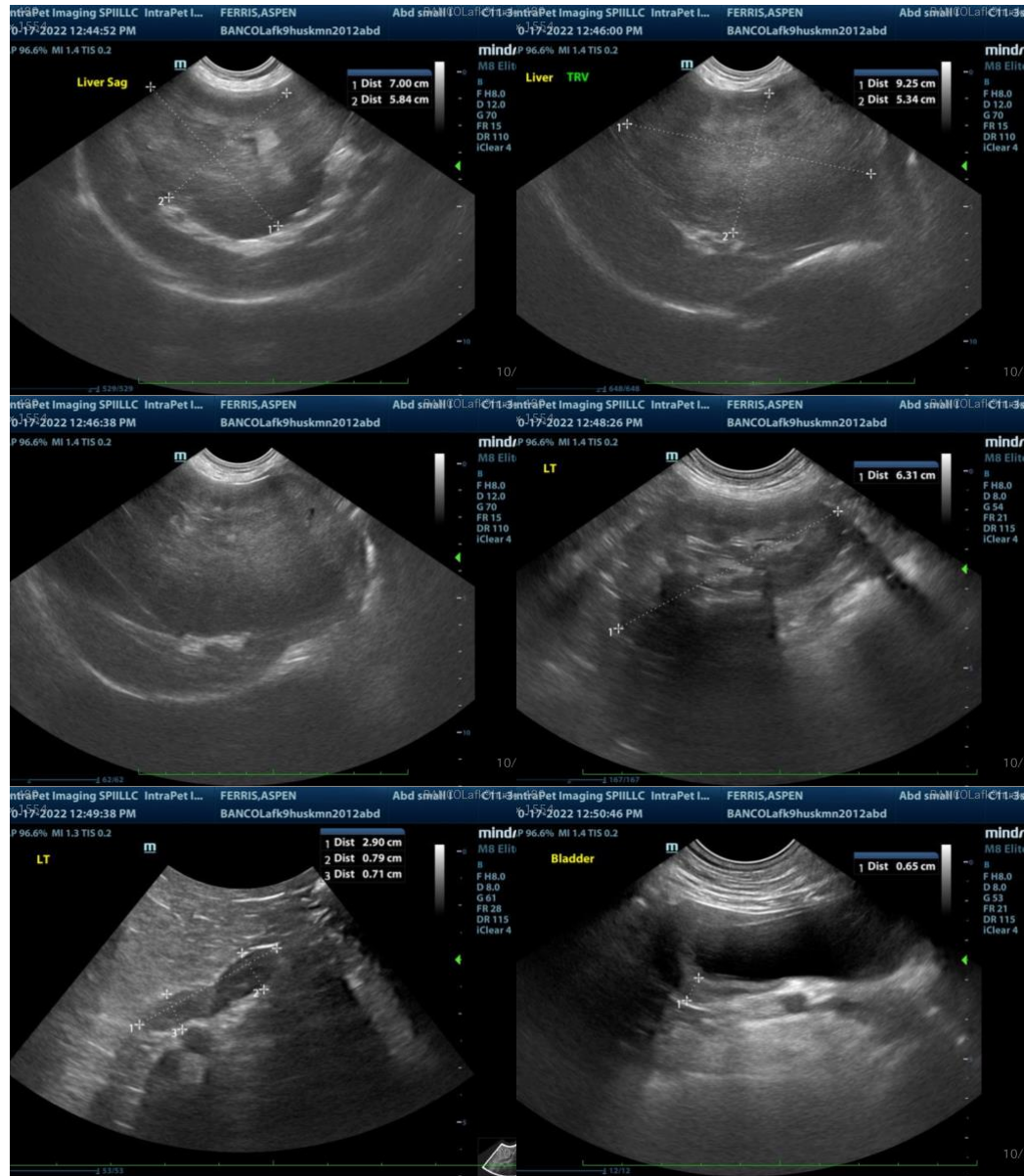
## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

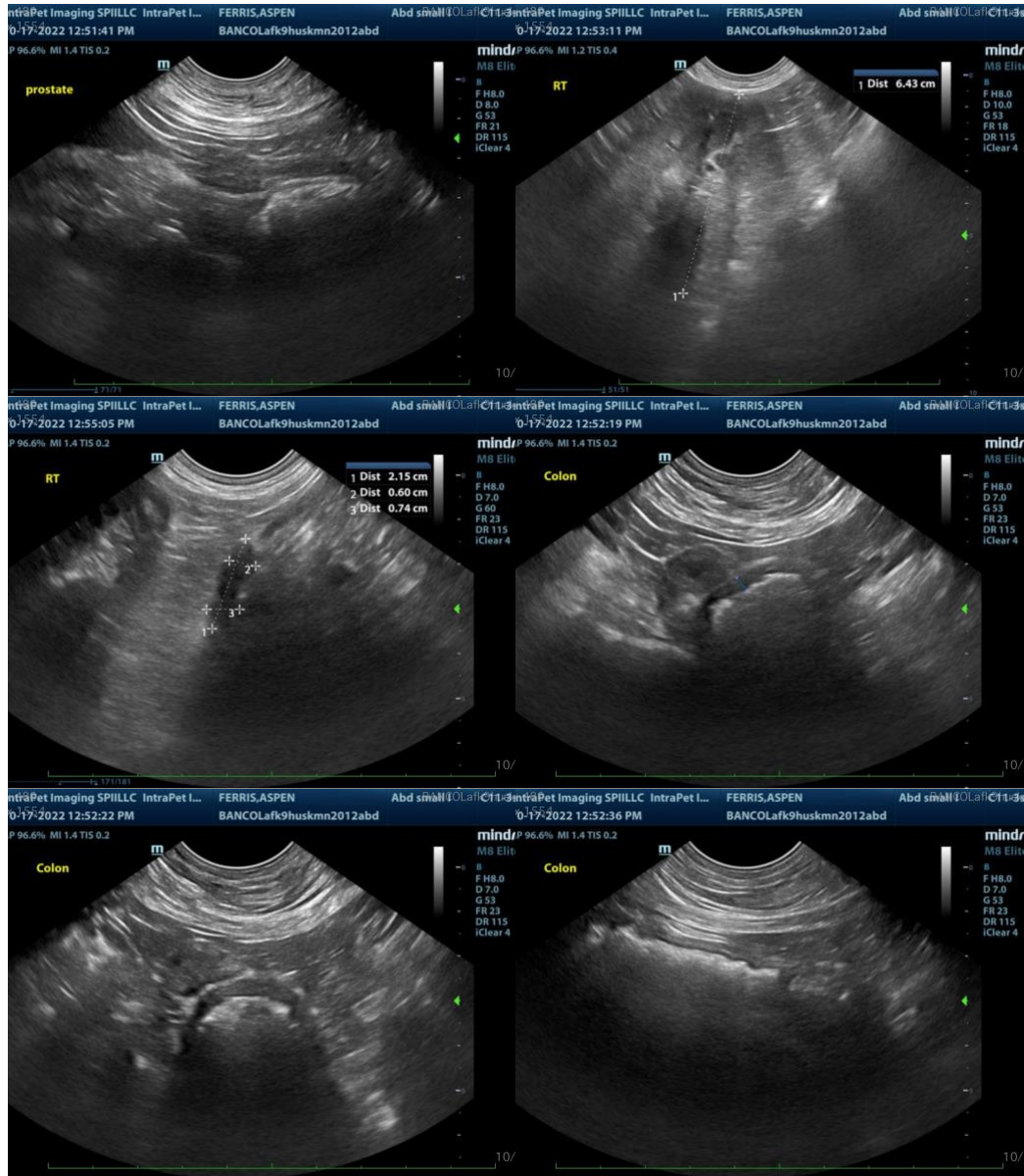
Three view thoracic radiographs are recommended for further assessment of cardio-pulmonary status as well as to further evaluate for any evidence of metastatic disease, if not recently evaluated.

A fine needle aspirate of the liver mass is recommended, if patients coagulation status is appropriate.

Given the mild colon changes, a fecal exam is recommended if not recently evaluated, as well as empirical deworming with a 5-day course of Panacur, even if the fecal exam is negative. If large bowel clinical signs are present, further investigation of this finding may be warranted, i.e., colonoscopy versus other.

Urinalysis and, if indicated based on urinalysis results, urine culture are recommended. If protein is present in an otherwise quiet sediment, protein quantification with a urine protein to creatinine ration is recommended.





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