



## PATIENT

Rose Abraham

## SPECIES

Canine

## BREED

Australian Shepherd

## SEX

Spayed Female

## AGE

5

## WEIGHT

48 lbs

## INTERPRETED BY

Beth Johnson, DVM  
DACVIM

## IMAGING PERFORMED BY

Gordon Brackee, DVM

## HOSPITAL NAME

Bradenton Veterinary  
Hospital

## REFERRING VET

Gordon Brackee, DVM

## INVOICE

73048

## DATE

2/18/26

## PRESENTING CLINICAL SIGNS

Routine BW on 8-19-2025 found elevated ALT (>1000) with normal ALP 129, GGT <10, and tBili 0.4. Owner advised to monitor and recheck.

On 2-17-2026, Owner returned due to vomiting, lethargy, jaundice, and peritoneal fluid. Blood work repeated, and found elevated ALT (556), ALP 385, GGT 54, and tBili 7.9. Given fluid therapy and Cerenia inj, Metronidazole, and Denamarin were started, and AUS ordered for the next morning.

Rose is current for Lepto vaccination.

Abnormal PE/Chem/CBC/UA Results: 8-19-2025 ALT >1000, ALP 129, GGT <10, and tBili 0.4. WBC 5.9, RBC 8.3, HCT 58 2-17-2026, ALT 556, ALP 385, GGT 54, and tBili 7.9. WBC 13.1, RBC 7.6, HCT 28

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### Urinary System

Urinary bladder is adequately distended. It has a normal uniform wall thickness. Contents include primarily anechoic fluid with a moderate amount of echogenic non-shadowing debris, most consistent with exfoliated cells, mucous and/or small blood clots. Both sterile inflammation as well as urinary tract infection can present with echogenic debris. No masses or cystoliths are observed. The trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

The right kidney is normal is size (7.4 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.

The left kidney is normal is size (6.4 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.

### Adrenal Glands

The adrenal glands are unable to be well visualized in these images.

### Spleen

Spleen is subjectively large in size with normal smooth margins. Parenchyma is normal in echogenicity with a diffusely coarse/heterogenous echotexture. No discrete sizable focal nodules or masses are observed. Splenic vasculature appears normal.

### Liver

Liver is relatively normal in size with markedly undulating or scalloped capsular contour or margins. Parenchyma is diffusely heterogenous with increased portal markings and coarse architecture. No focal nodules or masses are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

The gallbladder is unable to be well visualized.



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## *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, visualization is partially inhibited by gas.

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 (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

## *Pancreas*

The pancreas that is observed 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 a large amount of free fluid and diffusely subtly enhanced hyperechoic mesentery and omentum throughout these images.

There is no apparent pathologic lymphadenopathy noted in these images.

## PRIMARY FINDINGS

- Coarse splenomegaly – can be associated with congestion caused by sedation (if sedated) but can also be associated with diffuse infiltrative disease. Both benign conditions such as extramedullary hematopoiesis, lymphoid hyperplasia, as well as infiltrative neoplastic diseases such as round cell neoplasia should be considered.
- An obvious cause for the significant liver changes is not identified in these images. Microscopic disease such as Leptospirosis, bacterial cholangiohepatitis, chronic active hepatitis, copper-associated hepatotoxicity, other hepatotoxicity, other reactive hepatopathy, infiltrative neoplasia, etc. cannot be definitively ruled out.
- The large amount of free fluid is of unknown origin. Differentials (unless already ruled out) could include increased hydrostatic pressure (cardiac disease and/or vascular or lymph blockage), decreased oncotic pressure (low albumin), vasculitis, paraneoplastic fluid, rupture/leakage of/from an organ (GI, GB, UB, other), blood (hemoabdomen), other.

## SECONDARY FINDINGS

- Moderate amount of echogenic urinary bladder debris.

## 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.



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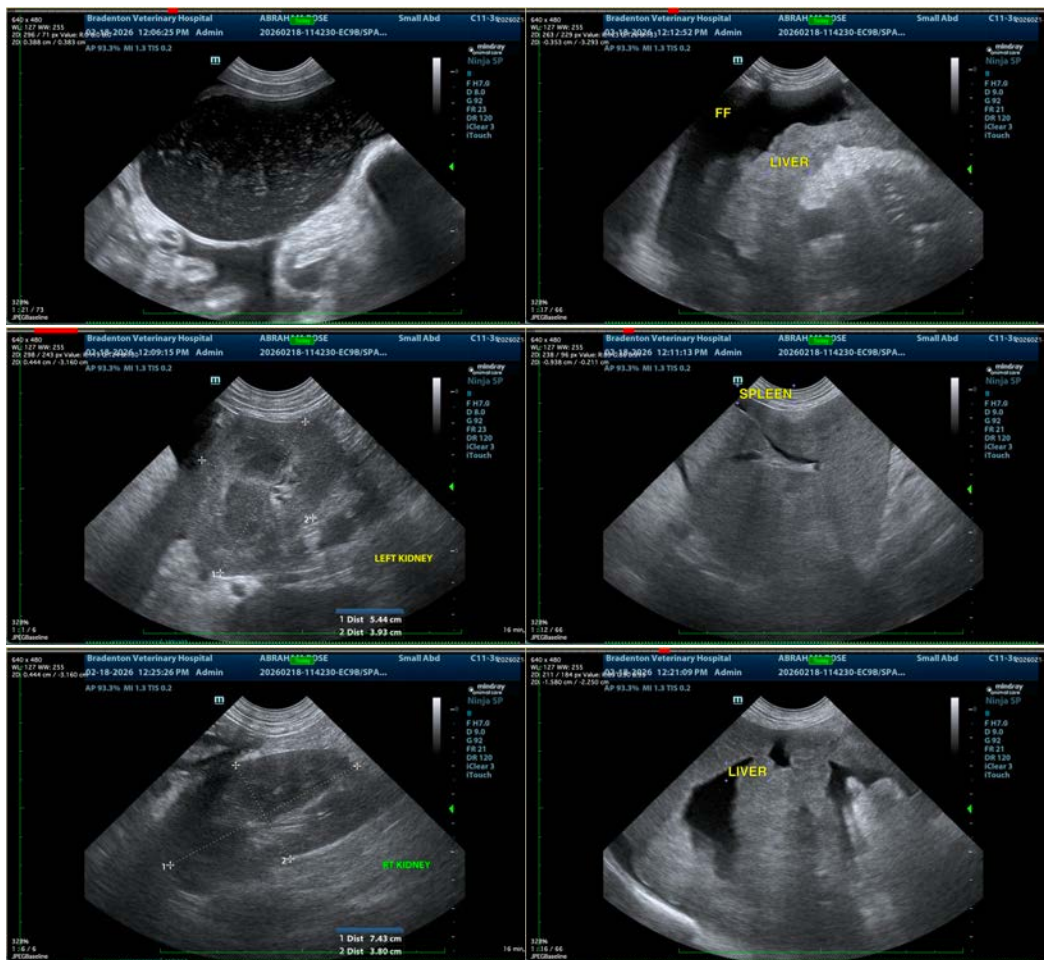
**DATE**

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Sampling of the free abdominal fluid could be considered if patient's coagulation status is appropriate.

Ultimately, however, sampling of the liver and spleen is recommended if patient's coagulation status is appropriate. Fine needle aspirates could be considered to further assess inflammatory cell type, look for/rule in versus out round cell neoplasia, etc., but if a cytologic diagnosis is unable to be obtained, ultimately a liver biopsy, being sure to include copper level assessment, if possible, may be necessary for definitive diagnosis and therefore to further guide medical management.

Other than supportive/symptomatic medical management of clinical signs, further treatment recommendations are largely dependent on results of the above.



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.

**Beth Johnson, DVM, DACVIM**  
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