



**DATE PRESENTING CLINICAL SIGNS**

7/26/22 Approximately 10-14 day history of lethargy, intermittent poor appetite, abdominal distention. Progressive anemia, thrombocytopenia, neutrophilia. Borderline low alb/chol. rDVM US described hepatic nodules, splenomegaly, possible GB mass. Bartonella PCR positive

**PATIENT**

Rudi Lawler Current Medications: Prednisone 10mg once daily (tapering off)  
Doxycycline 300mg BID, Marbofloxacin 200mg once daily

**SPECIES**

Canine

Lab Results: 7/23--CBC PLT 53K (manual 50-100K), HCT 24%, retics 582k w/16nRBC, neutrophils 37K with mild toxic change. Chem--low normal alb 2.7, chol 133, ALP 177, tbil 0.4.  
Date of Previous IntraPet Ultrasound: No previous.  
Sedation: Not required to complete full diagnostic ultrasound.  
Stat Report: Not requested.

**BREED**

German Shepherd

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**SEX**

Neutered Male

**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.

**AGE**

11/7/13

The visualized areas of prostate and surrounding tissue appear normal. Unfortunately, the prostate is not fully visualized likely due to its intrapelvic location. Correlate with rectal exam findings.

**WEIGHT**

120 Pounds

The left kidney has a normal shape and size (8.58 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**INTERPRETED BY**

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

The right kidney has a normal shape and size (8.48 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**IMAGING PERFORMED BY**

Andi Parkinson RDMS

**Adrenal Glands**

The region of left adrenal (Cranial to left renal artery) is unremarkable but the adrenal is not distinctly visualized. No evidence of a mass effect.

The region of the right adrenal (between right cranial kidney and vena cava) is unremarkable, but the adrenal is not distinctly visualized. No evidence of a mass effect.

**HOSPITAL NAME**

Nexus Vet Specialists

**Spleen**

The spleen is large, irregular and mottled. The blood flow through the hilus and splenic parenchyma appears normal. There are multiple hypoechoic nodules/masses visualized within the splenic parenchyma that are deforming the splenic capsule. Two such lesions measure at 3.14 cm x 2.63 cm and 1.9 cm.

**REFERRING VET**

Dr. Steele

**Liver**

The liver is subjectively normal in size, but irregular. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. There are numerous hepatic masses/nodules visualized throughout the parenchyma. Some of these lesions are hyperechoic and some are hypoechoic. Many are deforming the margins of the liver. Two hyperechoic lesions measure at 1.48 cm and 1.66 cm. A hypoechoic lesion is visualized measuring 1.5 cm, and a larger mixed echogenic mass effects measures 4.0 cm.

**INVOICE**

39818

The gallbladder 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 contains minimal luminal contents. 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. 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 (between 0.3-0.5cm in wall thickness) and the jejunum measured as normal (between 0.2-0.47cm.) 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 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 large volume of echogenic free fluid. No lymphadenopathy is noted. The omentum appears somewhat irregular, but does not appear overtly inflamed.

### ***Other***

A brief view of the heart was submitted. No significant pericardial effusion was seen.

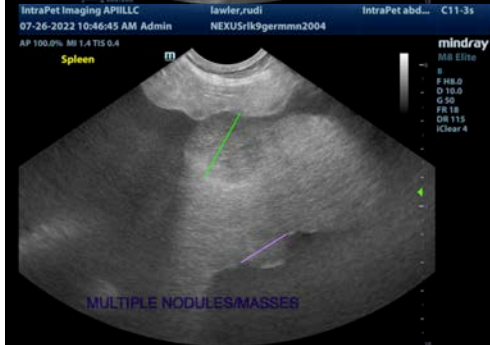
## **ULTRASONOGRAPHIC FINDINGS**

- Multiple hypoechoic splenic nodules/masses deforming the splenic capsule – Of primary concern would be an underlying metastatic neoplastic process, although other differentials exist. Consider sampling.
- Irregular, heterogeneous liver with numerous hyper- and hypoechoic nodules that are deforming the hepatic margins – Of primary concern would be metastatic neoplasia, although other differentials (including benign nodules) exist.
- Large volume free echogenic fluid.

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

The spleen and liver both contain prominent hyper- and hypoechoic nodules that appear to be deforming the architecture of these organs. Of primary concern would be a metastatic neoplastic process, but other differentials are possible. Additionally, there is a large volume of free echogenic fluid.

Additional recommendations regarding this case are to be implemented by Dr. Cara Steele.





**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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