

**DATE**

6/6/22

**PRESENTING CLINICAL SIGNS**

Present for week long hx of lethargy and vomiting. On PE peripheral lymphadenopathy of submandibular and popliteal LN's

**PATIENT**

Kali Brewster

Current Medications: 6/3- cerenia 80 mg po sid, denamarin 1 tab po sid

Amoxicillin 500 mg po bid. Gabapentin 600 mg po 2-3 hours prior to scan.

Lab Results: FNA of popliteal LN's pending. Hepatomegaly, splenomegaly- potential mass ass with spleen on rads. GGT 12 ALT 271 ALP 668 SDMA 33 BUN 11 Chol 86, 4dx- negative.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Andi Parkinson, BS, RDMS.

**SPECIES**

Canine

**BREED**

Labrador Mix

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****Urinary System**

Urinary bladder is moderately distended with anechoic contents. It has normal uniform wall thickness (< 0.2 cm). No masses or cystoliths are observed.

**SEX**

Spayed Female

Left kidney is normal in size (7.6 cm), shape and echogenicity. It has smooth peripheral margination and appropriate corticomedullary distinction. There is no pyelectasia noted. No mineral is observed.

**AGE**

8/1/11

Right kidney is normal in size (6.94 cm), shape and echogenicity. It has smooth peripheral margination and appropriate corticomedullary distinction. There is no pyelectasia noted. No mineral is observed.

**WEIGHT**

80 lbs

**Adrenal Glands**

Left adrenal gland is normal in size (2.97 cm long, 0.86 cm at cranial pole and 1.2 cm at caudal pole), shape and contour. Corticomedullary structure is unremarkable.

**INTERPRETED BY**Beth Johnson, DVM  
DACVIM

Right adrenal gland is normal in size (2.66 cm long, 0.77 cm at cranial pole and 0.97 cm at caudal pole), shape and contour. Corticomedullary structure is unremarkable.

**HOSPITAL NAME**

Eastern AH

**Spleen**

Spleen is subjectively enlarged in size with rounded margins but intact capsule. Parenchyma is homogeneously coarse/mottled in echotexture and normal to hypoechoic in echogenicity. No focal nodules or masses are observed. Splenic vasculature appears normal. A small infarcted area was noted at the tip of the tail of the spleen.

**REFERRING VET**

Dr. Haviland

**Liver**

Liver is subjectively enlarged. Margins are smooth but round. It has a normal homogenous echotexture. Parenchyma is diffusely hyperechoic characterized by less prominent than normal portal vein walls and increased echogenicity relative to the spleen. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion. Gallbladder is mildly distended with anechoic contents. The wall is smooth without visible thickening. There is no evidence of common bile duct dilation.

**INVOICE**

30861

**Gastrointestinal**

The visible gastric wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm). The stomach is empty.

The small intestines are normal in wall thickness and layering. Small intestinal motility appears adequate (1-3 contractions per min). There are no luminal contents noted within small intestines.

Colon is normal in wall thickness (< 0.2 cm) and layering.

### ***Pancreas***

Pancreas has normal homogenous echotexture and is normal in echogenicity and smooth margination. There is no evidence of peripancreatic inflammation.

### ***Free Abdomen***

There is marked lymphadenopathy throughout the abdomen. The lymph nodes appear round, hypoechoic and are surrounded by enhanced, hyperechoic fat and mesentery. No free fluid is appreciated in these images including no pericardial effusion.

## **ULTRASONOGRAPHIC FINDINGS**

### **PRIMARY FINDINGS:**

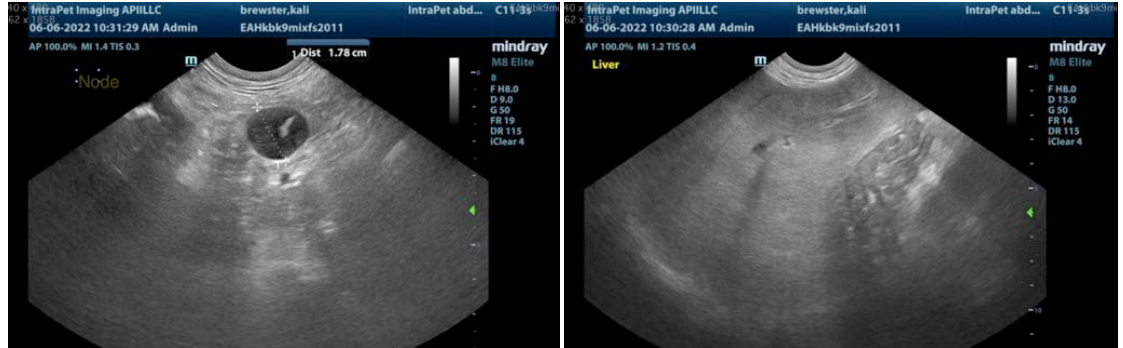
- Coarse splenomegaly – can be associated with congestion caused by sedation (if sedated) but can also be associated with diffuse infiltrative disease. Both benign conditions such as extramedullary hematopoiesis, lymphoid hyperplasia, amyloidosis (leave amyloidosis out if canine) as well as infiltrative neoplastic diseases such as round cell neoplasia should be considered. There is a small infarct near the tail of the spleen. Given the concurrent lymphadenopathy infiltrative neoplasia is higher on the list.
- Hyperechoic hepatomegaly canine – most consistent with benign steroid (endocrine) hepatopathy or reactive or idiopathic hepatopathy. Infiltrative neoplasia such as round cell neoplasia is also possible, but considered less likely. Given the concurrent changes infiltrative neoplasia needs to be considered higher on the list.
- Diffuse lymphadenopathy. This is concerning for infiltrative neoplasia such as lymphoma.

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

The top differential for this patient's ultrasonographic abnormalities is lymphoma. Therefore, the reportedly already pending FNA cytology is recommended to definitively diagnose lymphoma.

If staging is desired and/or oncologist wants to know about definitive spleen and liver involvement a FNA of the spleen and liver could be performed, if the patient's coagulation status is appropriate to definitively rule in or rule out involvement of these organs.





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