



## DATE PRESENTING CLINICAL SIGNS

3/26/26

## PATIENT

Jesse Kim

## SPECIES

Canine

## BREED

Great Pyrenees

## SEX

Neutered Male

## AGE

3/25/21

## WEIGHT

101.7 lbs

## INTERPRETED BY

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

## HOSPITAL NAME

Animal Emergency  
Hospital

## REFERRING VET

Dr. Shannahan

## INVOICE

74044

**Patient History:** Jesse presents for acute collapse and inability to ambulate. Patient History: - Rescue from hoarding case, owned for 5 years since puppyhood - Chronically thin body condition - Skin infection ongoing for 3-4 weeks, intermittent despite treatment - Initially treated with 2-week course of antibiotics with temporary improvement, then recurrence - Currently on Animax ointment topically. Eating approximately one meal per day when on antibiotics - Vomiting episodes this past Saturday and Sunday, described as "quite a lot" - Intermittent vomiting while on antibiotics - No diarrhea noted - Cerenia administered 2 days ago, not given yesterday due to patient stress and inappetence - Walking normally until today - Acute onset collapse today: found recumbent in front of kennel, unable to rise despite attempts - No witnessed precipitating event (no vomiting, diarrhea, or coughing immediately prior). Recent blood work performed at Swan Creek last week - Temperature of 103.5°F measured at home a couple days ago

**Current Medications:** Hydromorphone, Acepromazine, Unasyn, Ondansetron.

**Labwork Results:** Labwork attached.

**Date of Previous IntraPet Ultrasound:** No previous.

**Sedation:** Not required to complete full diagnostic ultrasound.

**Stat Report:** Declined.

**Imaging Performed by:** Rachel Brillhart, RDMS.

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### Urinary System

The urinary bladder is mildly distended with urine. The Bladder wall appears of normal thickness with a smooth mucosal surface. There is an inflated foley catheter visualized in the trigone region, and saline instilled. There is some suspended echogenic debris in the urinary bladder. The cystourethral junction and urethra are not visualized due to interference from the foley catheter.

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.

The left kidney has a normal shape and size (7.89 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (7.29 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

### Adrenal Glands

The left adrenal gland is large, measuring 0.84 cm at the cranial pole and 1.06 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

The right adrenal gland is normal in size measuring 0.78 cm at the cranial pole and 0.72 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

### ***Spleen***

The spleen is large, measuring 3.05 cm in width at the hilus. The spleen echotexture is heterogenous and mottled, the splenic capsule is smooth with no irregularities. There is a hypoechoic nodule visualized measuring 0.77 cm x 0.82 cm, and a thrombus in the splenic vein. Vascularity of the splenic tissue appears appropriate.

### ***Liver***

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

The gall bladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. There is a moderate amount of non-organized echogenic debris. The cystic and common bile ducts are normal/not visible.

### ***Gastrointestinal***

The stomach contains mild fluid. 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 uniform diameter with minimal fluid distension. Wall thickness is increased. Bowel loops follow a typical curvilinear path. Visualized peristalsis appears appropriate. There are some focal segments of small intestine that appear more severely thickened with a prominent irregular muscularis layer measuring up to 0.66 cm. Normal jejunum wall measures 0.42 cm. There are some areas of small bowel with mild fluid and gas distention.

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 mildly prominent and mottled compared to the surrounding isoechoic mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

### ***Free Abdomen***

There is scant free fluid with irregular hyperechoic mottled reactive appearing omentum, particularly in the mid abdominal region. There is no evidence of a diffuse lymphadenopathy. An iliac lymph node is prominent measuring 0.70 cm x 1.93 cm. A prominent mesenteric lymph node is visualized measuring 0.92 cm x 3.63 cm.

### ***Other***

The right auricle and pericardium were visualized and were unremarkable. No obvious pathology is visualized. If cardiac function evaluation is desired a full echocardiogram is warranted.

## **PRIMARY FINDINGS**

- Large, mottled spleen with hypoechoic nodule and a splenic thrombus – The diffuse splenic changes are non-specific and could be consistent with lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive diagnosis.

- Mottled reactive mesentery with slightly irregular pancreas – Findings are most consistent with pancreatic remodeling, although mild pancreatitis cannot be ruled out. General mesenteric inflammation (sterile versus septic) is present.
- Heterogeneous liver – The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy.
- Segmental thickened, irregular bowel loops – Findings are most consistent with highly inflammatory change, edema or early neoplastic change.
- Occasional prominent mesenteric lymph nodes – Findings are most consistent with reactive lymph nodes. Early neoplastic change cannot be ruled out.

## **SECONDARY FINDINGS**

- Indwelling foley catheter in the urinary bladder with echogenic urine – Correlate with urinalysis +/- culture.
- Borderline large left adrenal gland – Findings are most consistent with anatomic variation or mild hyperplasia-recommend continued monitoring.
- Moderate gallbladder debris – The significance of the aggregated gallbladder debris is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting but seems unlikely to be causing a current issue. Recommend continued monitoring.

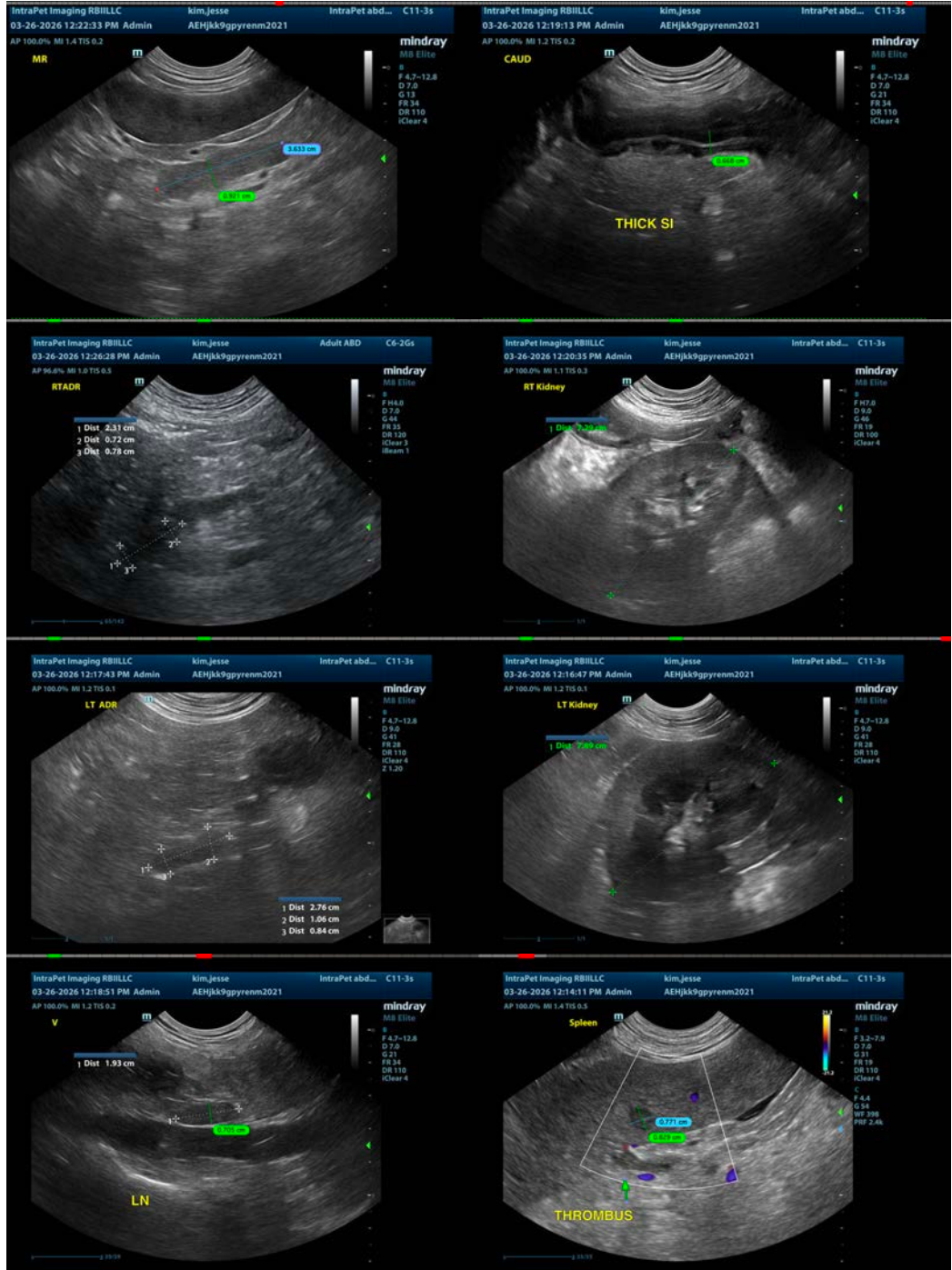
## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

There is generalized significant inflammation in the abdomen. The spleen is mottled with an ill-defined hypoechoic nodule and a thrombus. Recommend a fine needle aspirate of the spleen for further evaluation.

Additionally, there are some focal segments of small intestine that appear significantly thickened with irregular muscularis. This could be due to edema and severe inflammation or even neoplastic change.

Generally, the changes involving the abnormal mesentery, the fluid, bowel changes, prominent lymph nodes, etc. are likely secondary to either an inflammatory condition, infectious process, or neoplastic disease (possibly contributing to a hypercoagulable state). Consider blood cultures, coagulation profiles, and an echocardiogram, looking for evidence of sepsis. If neurologic evaluation indicates a spinal issue, consider advanced imaging, looking for a possible thrombus, septic emboli, etc.

Recommend empirical treatment for sepsis and close continued monitoring. Additionally consider 3-view thoracic radiographs, looking for evidence of aspiration pneumonia, neoplastic infiltrates, etc.





**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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)  
info@sonopath.com