

**DATE PRESENTING CLINICAL SIGNS**

8/19/21

History: 8-18-2021 Notes: Patient was referred for hospitalization and ultrasound. Saw RDVM on 8/16 for acute vomiting. Has HX of increased liver enzymes and is on Denamarin. Also, HX of arthritis and has tried Galliprant- discontinued due to GI upset- and gabapentin- discontinued due to excessive sedation. NSF on exam on 8/16 so gave SQ fluids and Cerenia. Patient didn't really eat much that day and went back to RDVM on 8/17. at that time, abdomen was painful, and patient was tachycardic. Had x-rays- no obvious FB/ obstruction or abnormalities other than pre-existing rounded liver margin. Blood work showed increased WBC's, increased LE's, increased Creat. Patient was given SQ fluids, Cerenia, Buprenex, sent home with Metronidazole. She slept for a long time, then got up and ate at 8 pm. Held that down but then at 4 am started vomiting and was very restless and painful. RDVM recommended owner come here. Assessment: Restless, tachycardia, painful. DDX include GI pain vs. back pain vs open.

**PATIENT**

Napa Sradomski

**SPECIES**

Canine

**BREED**German Shepherd  
mixed breed**SEX**

Female, spayed

Current Medications: Buprenorphine, Ampicillin, Protonix, Maropitant.

Lab Results: Blood work showed increased WBC's, increased LE's, increased Creat. PCV high normal, USG 1.022 with an inactive sediment. No proteinuria.

Radiographs: no obvious FB/ obstruction or abnormalities other than pre-existing rounded liver margin.

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Sedation: Dexdomitor administered IV prior to scan.

Stat Report: STAT report not requested by the veterinarian.

**AGE**

8/18/2008

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

The urinary bladder is mildly distended with anechoic urine. The wall in the region of the apex is overall normal in thickness with a normal layering pattern for the level of repletion. In the region of the urinary bladder neck, the wall is slightly irregular and thickened. No cystic calculi are observed.

**WEIGHT**

64.8 lbs.

The left kidney is normal size (6.14 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**INTERPRETED BY**

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(Small Animal Internal  
Medicine)

The right kidney is normal size (6.45 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

**HOSPITAL NAME**Animal Emergency  
Hospital**Adrenal Glands**

The left adrenal gland is normal size (0.53 cm at cranial pole) (0.59 cm at caudal pole) (2.94 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

**REFERRING VET**

Dr. Goessling

The right adrenal gland is normal size (1.41 cm at cranial pole) (0.78 cm at caudal pole) (3.04 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

**INVOICE**

11915

**Spleen**

The spleen is subjectively normal in size (2.16 cm in width at the level of the hilus) with normal curvilinear peripheral contours. The parenchyma is slightly mottled in appearance. A few myelolipomas are observed in the region of the hilus. Splenic vasculature appears normal with no evidence of thrombosis.

### *Liver*

The liver is subjectively prominent in size with slightly swollen peripheral contours. The parenchyma is hypoechoic relative to the spleen and heterogeneous in appearance with a few ill-defined hyperechoic areas. Vascular and biliary tracts are of normal volume with no evidence of congestion. The gall bladder lumen is moderately distended. The wall is normal in thickness with questionable areas of mineralization. A moderate amount of echogenic to mineralized debris/sludge is observed within the lumen. The cystic and common bile ducts are normal/not seen.

### *Gastrointestinal*

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is not distended. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. No obstructive disease is noted.

### *Pancreas*

The region of the pancreas is isoechoic relative to surrounding omental fat. No obvious parenchymal abnormalities are observed. There is no evidence of regional inflammation or effusion.

### *Free Abdomen*

Trace free fluid is observed. The abdominal lymph nodes are normal/not visible.

### *Other*

A brief echocardiogram reveals no evidence of pericardial effusion or obvious right atrial/auricular mass.

Several ring down lesions are observed within the thorax. There are suspected pulmonary nodules adjacent to the diaphragm.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings:**

- Diffuse hepatopathy. Differentials include inflammatory/immune mediated disease, hepatotoxicosis (i.e., copper), infiltrative neoplasia (unlikely given the chronic nature of the liver enzyme elevations) +/- concurrent age-related pathology.

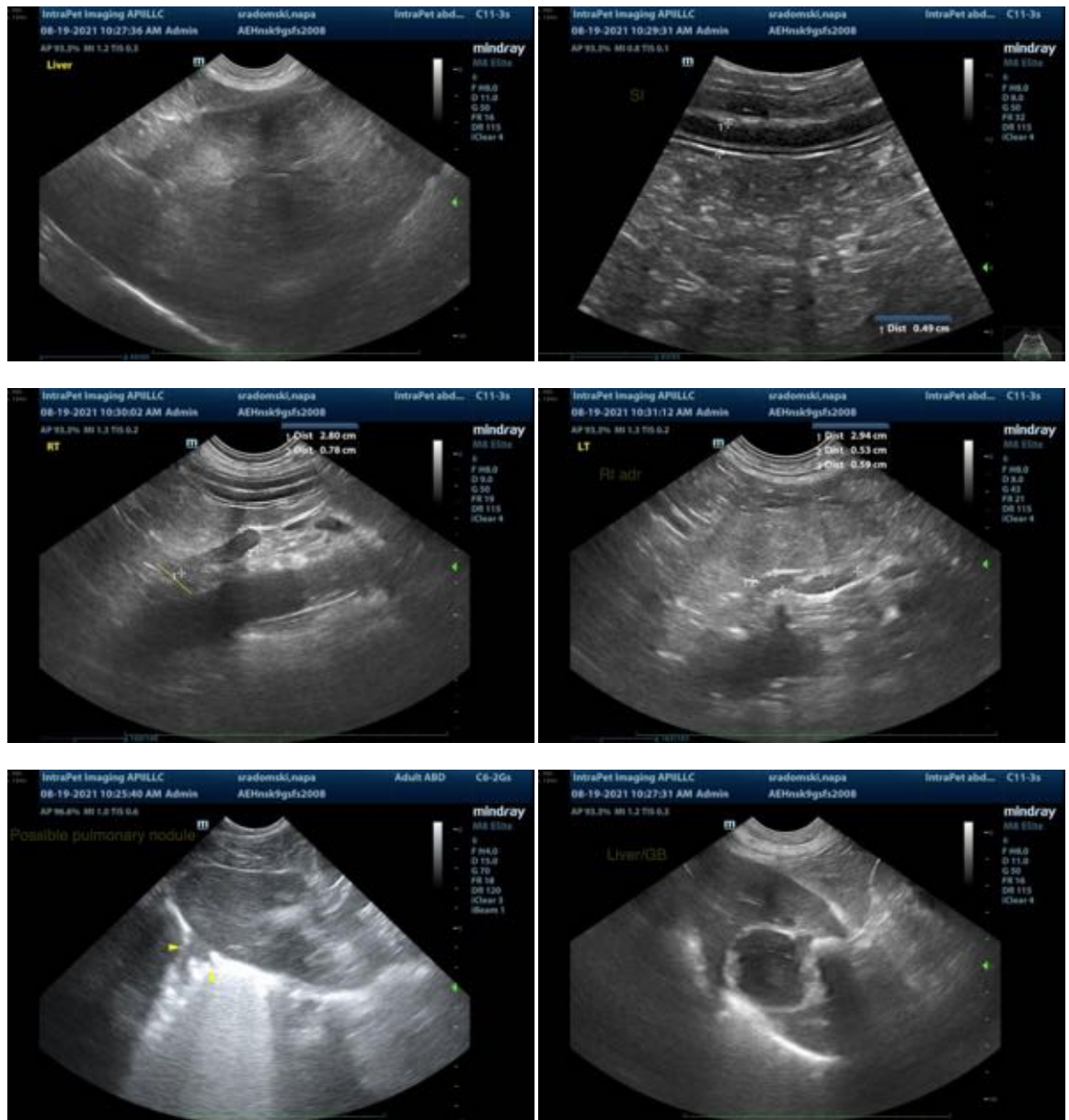
### **Secondary Findings:**

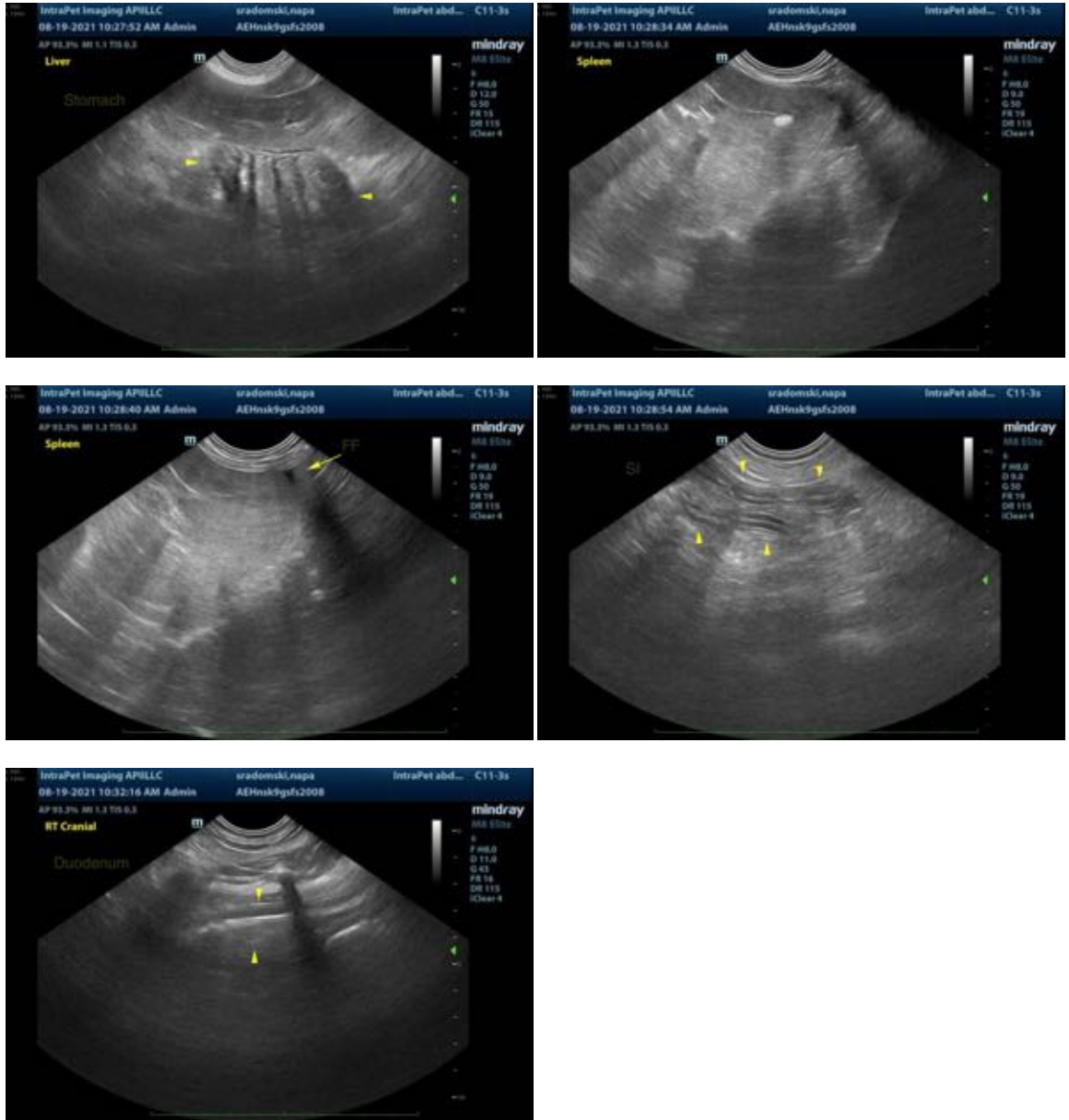
- Bilateral age-related renal changes.
- The urinary bladder wall changes could be consistent with cystitis or may be artifactual due to lack of luminal distention. Early neoplasia is possible but considered less likely. Correlation with clinical findings is recommended.
- The splenic parenchyma changes are most consistent with a benign process such as lymphoid hyperplasia, extramedullary hematopoiesis or splenitis with a low possibility of infiltrative neoplasia (i.e., lymphoma, mast cell neoplasia).

\*An obvious cause for the patient's vomiting episodes is not identified in this study. Considerations include microscopic gastrointestinal or pancreatic disease or an underlying metabolic issue.

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

- Due to the concern for pulmonary nodules/disease, further recommendations should be based on the results of the thoracic radiographs.
- For further evaluation of the hepatic pathology, liver tissue sampling (i.e., fine needle aspirate or biopsy) can be considered.
- An advanced GI workup may be warranted if gastrointestinal signs persist.





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.

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