



PATIENT

Cooper Armstrong

SPECIES

Canine

BREED

Labrador Retriever Mix

SEX

Neutered Male

AGE

12 years

WEIGHT

26.4 kg

INTERPRETED BY

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

IMAGING PERFORMED BY

Maria Lara

HOSPITAL NAME

Allure Veterinary
Hospital & Urgent Care

REFERRING VET

Dr. Jessica Castaneda

INVOICE

10947

DATE

12/17/2025

PRESENTING CLINICAL SIGNS

Patient is reported to have accidents in his kennel if left for more than 3.5hrs. Owner also reports Cooper is "slowing down". Urinalysis showed presence of bacteria and struvite crystals. Patient also has historical elevation of ALT.

Abnormal PE/Chem/CBC/UA Results: CBC - WNL Chem TP 8.7 g/dL (5.2-8.2) H ALB 4.0 g/dL (2.2-3.9) H GLOB 4.7 g/dL (2.5-4.5) H ALT 654 U/L TBIL 1.8 mg/dL (0.0-0.9) H AU pH 9.0 Urine Protein 30 mg/dL Blood/hemoglobin 250 Ery/mcL WBC 24/HPF RBC 12/HPF Bacteria - Cocci ++ Non-Squamous Cells <1HPF Struvite Crystals 1-5/HPF

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is significantly distended with urine. There's a large amount of suspended and dependent echogenic debris. 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.

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 (6.13 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 (6.5 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 normal in size measuring 0.52 cm at the cranial pole and 0.78 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 0.58 cm at the cranial pole and 0.45 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 subjectively normal in size (1.78 cm) and the echotexture is homogenous. The splenic capsule is smooth with no visible irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

Liver



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The liver is normal in size, and normal in echogenicity with smooth peripheral margins. The parenchyma is mildly 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. Luminal contents are mild and likely incidental at this time. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

Portions of the stomach are visualized but is not clearly visualized in its entirety. There's a mass effect in the cranial abdomen in the region of the stomach which could possibly be gastrointestinal in origin.

See under other

The visualized areas of duodenum (0.57 cm), jejunum (0.42 cm) and ileum have a uniform diameter with minimal fluid distension. Wall appears subjectively, mildly increased. Bowel loops follow a typical curvilinear path with distinct wall layering. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed

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

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

Other

There's a hypoechoic mass effect in the cranial abdomen caudal to the liver measuring 2.84 cm x 3.98 cm. This could be associated with the stomach/proximal GI tract, the head of the spleen, or the pancreas in this region.

ULTRASONOGRAPHIC FINDINGS

- Large amount of echogenic debris in the urinary bladder. The echogenic debris in the bladder lumen could be consistent with cells, crystals, and/or mucus. Recommend urinalysis and culture.
- Heterogenous liver. The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, infiltrative neoplasia (less likely) or other hepatopathy.
- Hypoechoic mass effect in the cranial abdomen. The exact origins of this lesion are not clear. Consider the possibility of a proximal gastrointestinal lesion (stomach/proximal duodenum, a mass effect off the head of the spleen, or a pancreatic lesion.)



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- Mildly thickened small intestine. The mild small intestinal wall changes may be a normal variant in this patient or could be consistent with an inflammatory process (e.g., inflammatory bowel disease).

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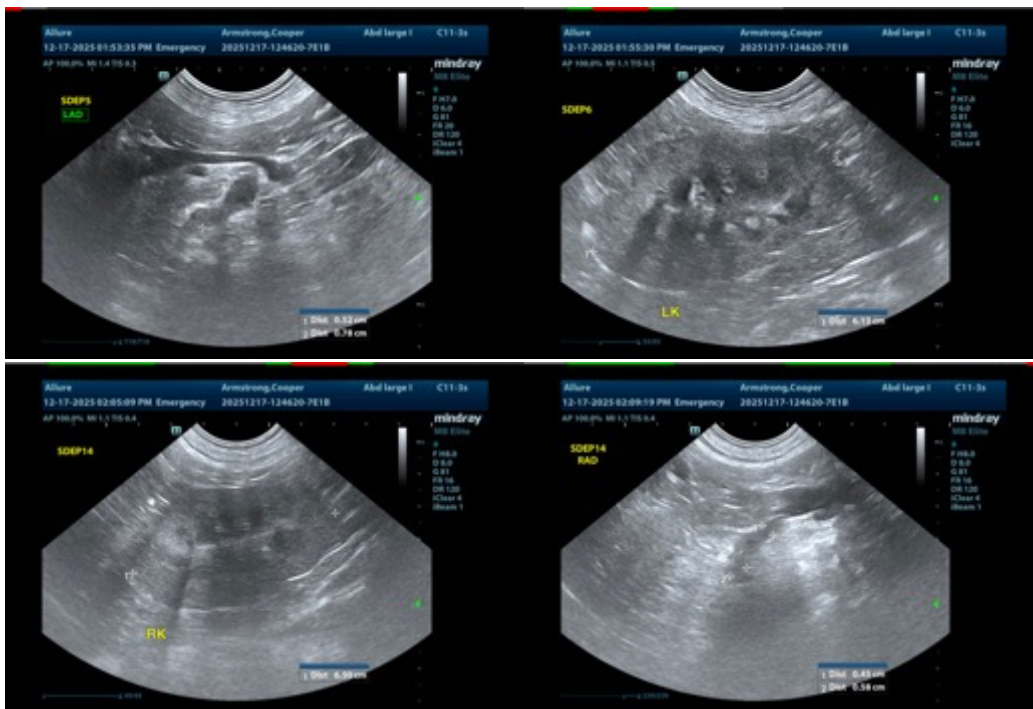
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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The changes visualized associated with the liver are non-specific. Consider a fine needle aspirate of the liver (provided coagulation parameters are normal) to evaluate for possible infiltrative neoplasia. Additionally, consider screening for leptospirosis and empirical treatment for acute liver injury with ursodiol, denamarin, and antibiotics. If liver enzymes are persistently elevated, biopsies of the liver with samples for histopathology, copper levels, and culture may be warranted.

There's a hypoechoic mass effect visualized in the cranial abdomen. The exact origins of this lesion are unclear. Portions of the stomach is poorly visualized. This could be associated with the stomach. Additionally, the head of the spleen can be in this region and the right limb of the pancreas. Consider a fine needle aspirate if this lesion for further evaluation. Alternately, you could consider a contrast CT scan of the abdomen, reevaluation under sedation, etc.

Consider three view thoracic radiographs to rule out concurrent thoracic disease/involvement.



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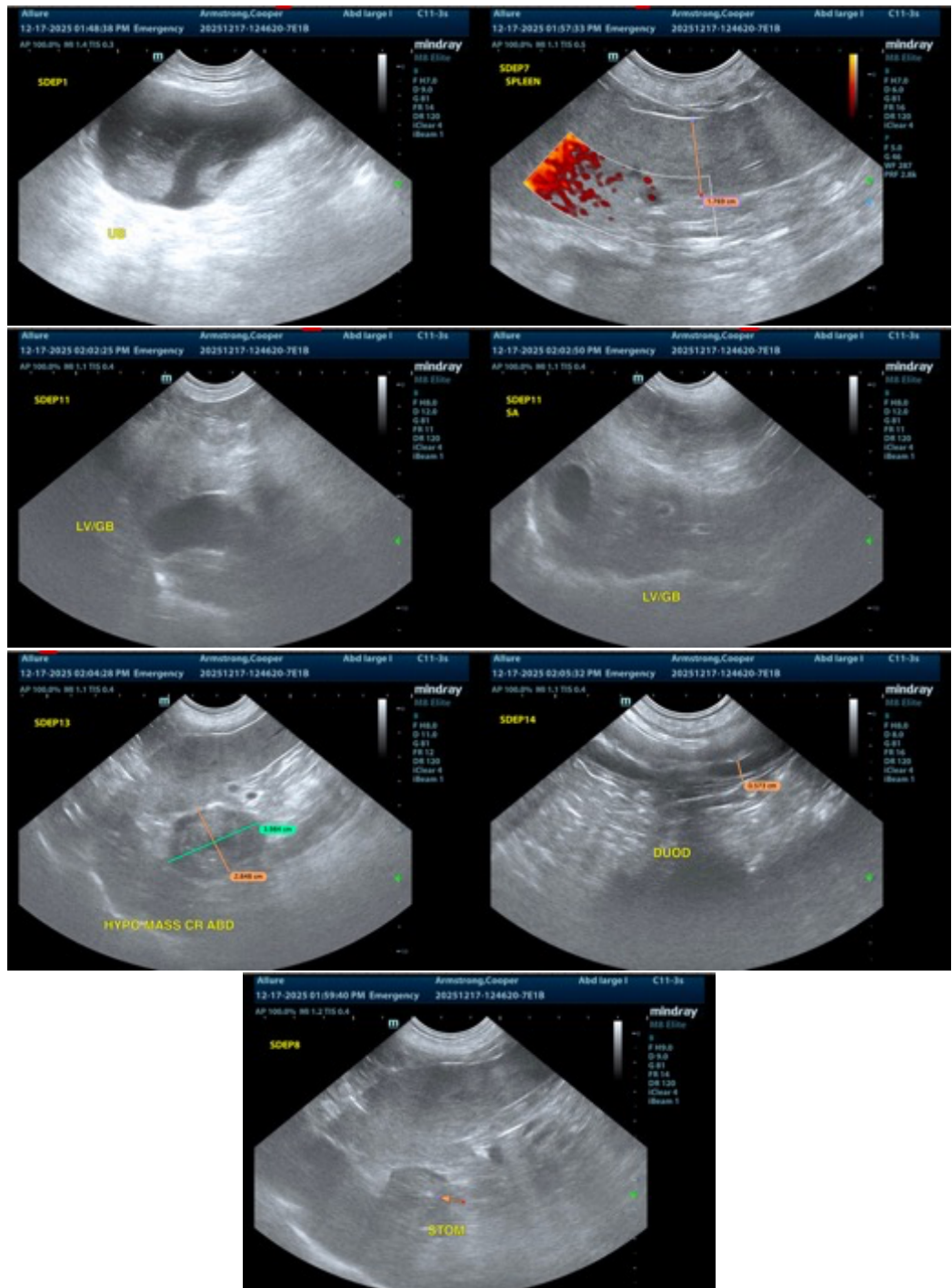
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

Thank you for this referral. If the clinical or image interpretation does not parallel your findings or if I



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can be of any further assistance please contact me.

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