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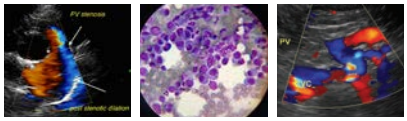

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DATE

12/15/22

PATIENT

Cabela Arnold

SPECIES

Canine

BREED

American Bulldog

SEX

Spayed Female

AGE

1/18/12

WEIGHT

51.6 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Andi Parkinson RDMS

HOSPITAL NAME

Animal Emergency Hospital

REFERRING VET

Dr. Saubier

INVOICE

43474

PRESENTING CLINICAL SIGNS

Beginning Monday started vomiting - owner tried bland diet - Rice. Did eat normally on Tuesday then Wednesday morning started again with Vomiting. Has continued throughout the day - dark yellow in color. No known toxic or foreign ingestions. Similar episode October - vomiting episode after Birthday party at the house - improved after bland diet. November after Thanksgiving - again vomiting and improved after bland diet.

Current Medications: Protonix, Ampicillin, Cerenia.
Radiographs: mild broncho-interstitial changes Lateral abdomen - stomach small amount of gas, liver appears small. Hazy appearance cranial abdomen
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with anechoic urine. The Bladder wall is diffusely mildly thickened, and the mucosa is mildly irregular. The trigone, ureteral papillae, and visible urethra (to a depth of 2cm) appear normal with no evidence of severe mucosal irregularities, or masses. In the dependent portion of the urinary bladder, there is mixed echogenic debris and focal shadowing material, most consistent with small calculi. One such calculus measures 0.73 cm. Findings are most consistent with bacterial cystitis or lack of urine distension. Recommend urinalysis and culture.

The left kidney has a normal shape and size (5.6 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 (5.89 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.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.85 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 0.92 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, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

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 gallbladder lumen is significantly distended with mixed echogenic debris that appears adhered to the gallbladder wall. The wall of the gall bladder is thickened, measuring approximately 0.37 cm, and is surrounded by inflammation and a scant amount of free fluid. There is no evidence of mucosal stranding or organization of the debris, and no evidence of bile duct dilation.

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. More distally (but possibly still in the transverse or ascending colon), there is a focal hypoechoic lesion measuring approximately 1.93 cm x 2.01 cm, which appears associated with bowel that is most consistent with colon. This appears to be a hypoechoic mass effect, as there is a small amount of color flow. Alternately, this could be a mildly echogenic cystic lesion.

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 no significant free fluid or lymphadenopathy. There is hyperechoic mesentery in the cranial abdomen around the liver and gallbladder.

ULTRASONOGRAPHIC FINDINGS

- Dependent mineralized debris visualized within the urinary bladder – Findings are most consistent with small calculi and sandy debris – Correlate with abdominal radiographs, urinalysis and culture.
- 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.
- Large, distended gallbladder with a thickened wall and surrounding inflammation – Findings are concerning for a diseased gallbladder. Correlate with bloodwork and the clinical picture, as surgery may need to be considered.
- Hypoechoic mass lesion visualized near the transverse colon – This is most consistent with a hypoechoic mass effect, although an echogenic cystic lesion cannot be excluded as a possibility.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

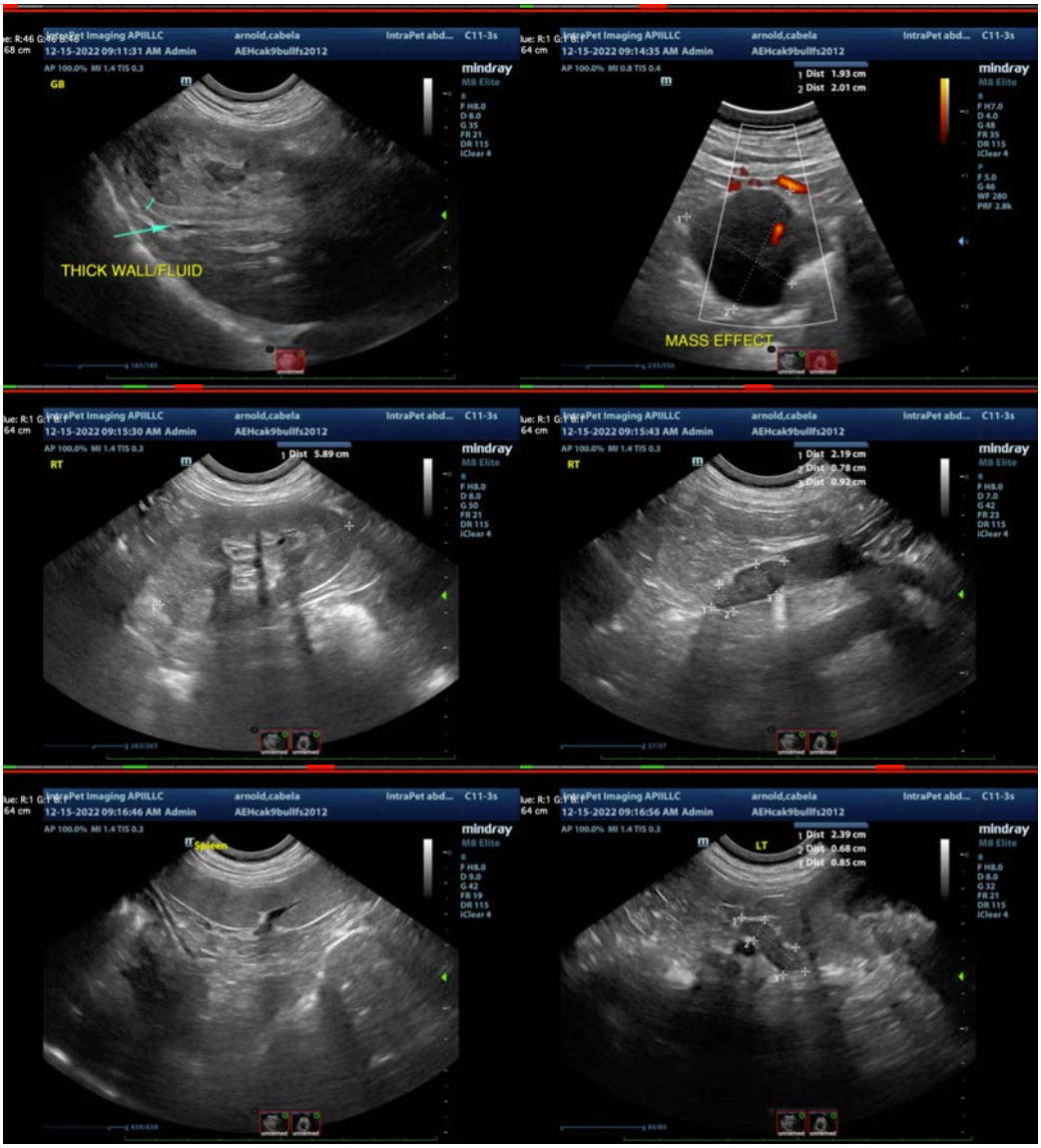
The gallbladder is distended with a thickened wall and surrounding inflammation. Although this does not have the classic appearance of a gallbladder mucocele, it is concerning for a diseased gallbladder, and if there is concurrent abdominal pain, inflammation, and elevated liver enzymes, removal of the gallbladder should be

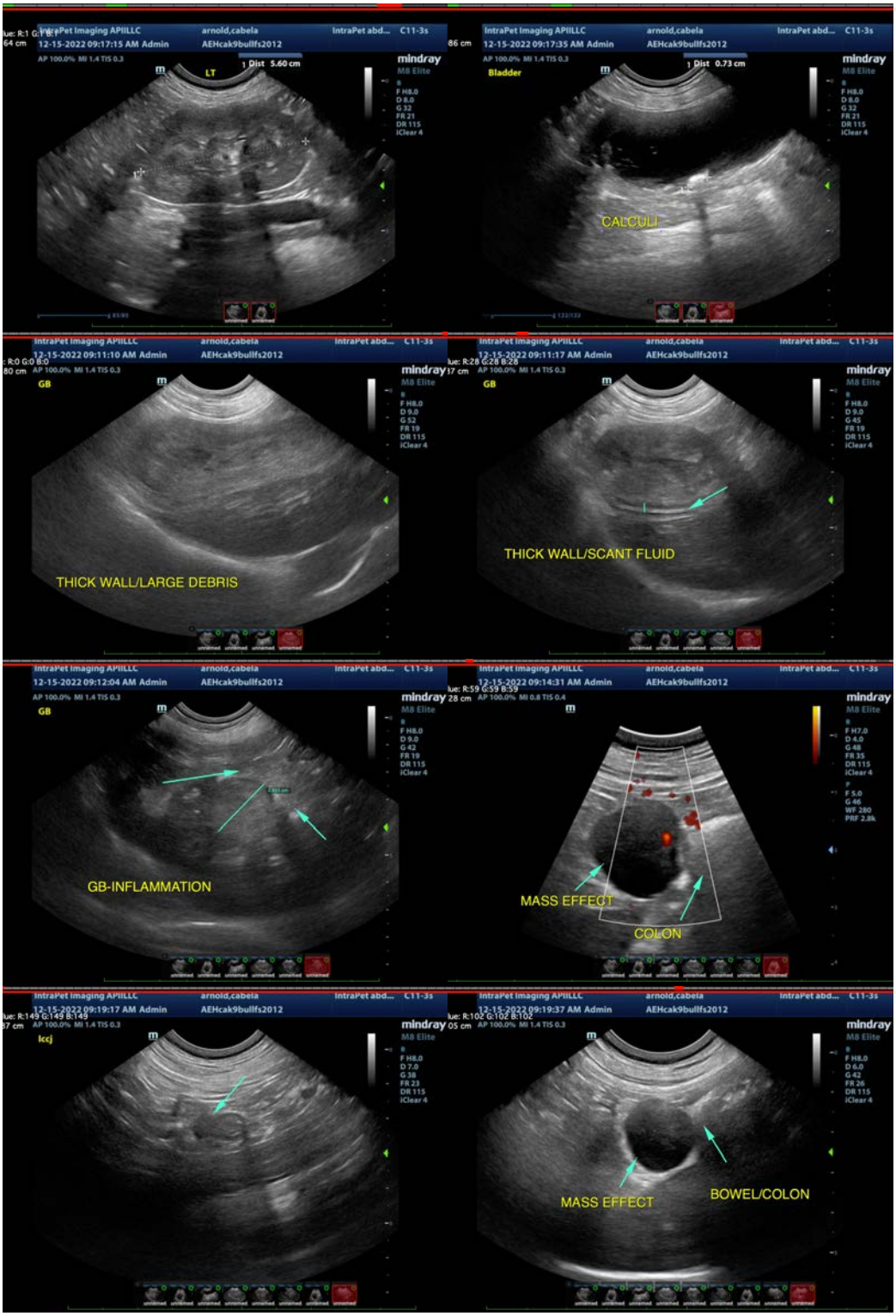
considered. Referral to a veterinary surgeon would be recommended for surgical evaluation.

Additionally, there is a hypoechoic structure in the mid to cranial abdomen that appears to be associated with the colon. This is most consistent with a hypoechoic mass lesion, although an echogenic cystic structure cannot be ruled out as a possibility. A fine needle aspirate of the structure could be considered and/or evaluation at the time of surgery for the gallbladder, and ideally removal or sampling of the lesion (histopathology, culture, etc.).

If a more conservative approach is desired, consider a contrast CT scan of the abdomen to further evaluate the gallbladder and the hypoechoic mass lesion.

Recommend three view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement.




LT
CALCULI
THICK WALL/LARGE DEBRIS
THICK WALL/SCANT FLUID
GB-INFLAMMATION
MASS EFFECT
COLON
MASS EFFECT
BOWEL/COLON

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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