

**DATE PRESENTING CLINICAL SIGNS**

6/24/22

Rocco is a 12 MI Pomeranian - ate some food at a cook out on Sunday - since Monday morning - heart murmur has not seen cardiologist - would get IVF and medications throughout the day at RDVM Monday and Tuesday - did not return to eating and more lethargic when would go home - RDVM BW 6/20 CBC: WBC 23k, Neu 22k Chem: BUN 46, P 11.4, Creat 1.8, ALT 576, ALP 386, GGT 12, T Bili 0.5 Medications: - metronidazole - cerenia

PATIENT

Rocco Bailey

SPECIES

Canine

Current Medications: Metronidazole, Provable, Ondansetron, Buprenorphine, Protonix, Cerenia.

Lab Results: See attached.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

BREED

Pomeranian

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**SEX**

Intact Male

Urinary System

The urinary bladder is moderately distended with anechoic urine. 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.

AGE

3/31/10

The prostate is large in size (2.59 cm x 3.41 cm) but has a regular shape with smooth external margins. The parenchyma is heterogenous. There are numerous small cystic structures within the parenchyma. The prostatic urethra appears normal.

WEIGHT

10.2 Pounds

The left kidney has a normal shape and size (4.69 cm) with non-obstructive nephroliths and mild pyelectasia at 0.19 cm. Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of infarcts or hydroureter. Renal vasculature is normal.

INTERPRETED BY

Kathleen Sennello DVM,
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The right kidney has a normal shape and size (4.51 cm) with non-obstructive nephroliths and mild pyelectasia at 0.11 cm. Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of infarcts or hydroureter. Renal vasculature is normal.

IMAGING PERFORMED BY

Rachel Brillhart RDMS

Adrenal Glands

The left adrenal gland is normal in size measuring 0.60 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.

HOSPITAL NAME

Animal Emergency
Hospital

The right adrenal gland is normal in size measuring 0.63 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.

REFERRING VET

Dr. Thompson

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.

INVOICE

39059

Liver

The liver is large in size, and normal in 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. There is a large mixed echogenic, solid mass effect on the right side of the liver measuring 5.03 cm x 5.21 cm.

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are primarily anechoic. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach is moderately dilated with fluid and irregular shadowing material most consistent with normal ingesta and gas. 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 layering is adequate and there is no impression of reduced peristaltic activity. There is a 1.83 cm soft shadowing structure visualized within the gastric lumen along with fluid and other material.

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. 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

Both the left and right testicles are visualized and appear within normal limits.

ULTRASONOGRAPHIC FINDINGS

- Large, heterogeneous, mildly cystic prostate – most consistent with benign prostatic hypertrophy +/- prostatitis.
- Decreased corticomedullary distinction in both kidneys with non-obstructive nephroliths and mild pyelectasia – The bilateral renal findings are consistent with age-related change.
- Large, heterogeneous liver with right-sided solid mass effect – 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. This mass lesion appears most consistent with a primary hepatic mass, which could be benign or malignant in nature.
- Moderate shadowing ingesta within the gastric lumen – correlate with feeding history, any oral medications, etc., and abdominal radiographs. If the patient was adequately fasted, consider possible ingested foreign material, delayed gastric emptying, etc.

- Non-formed fecal material and gas in the colon.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

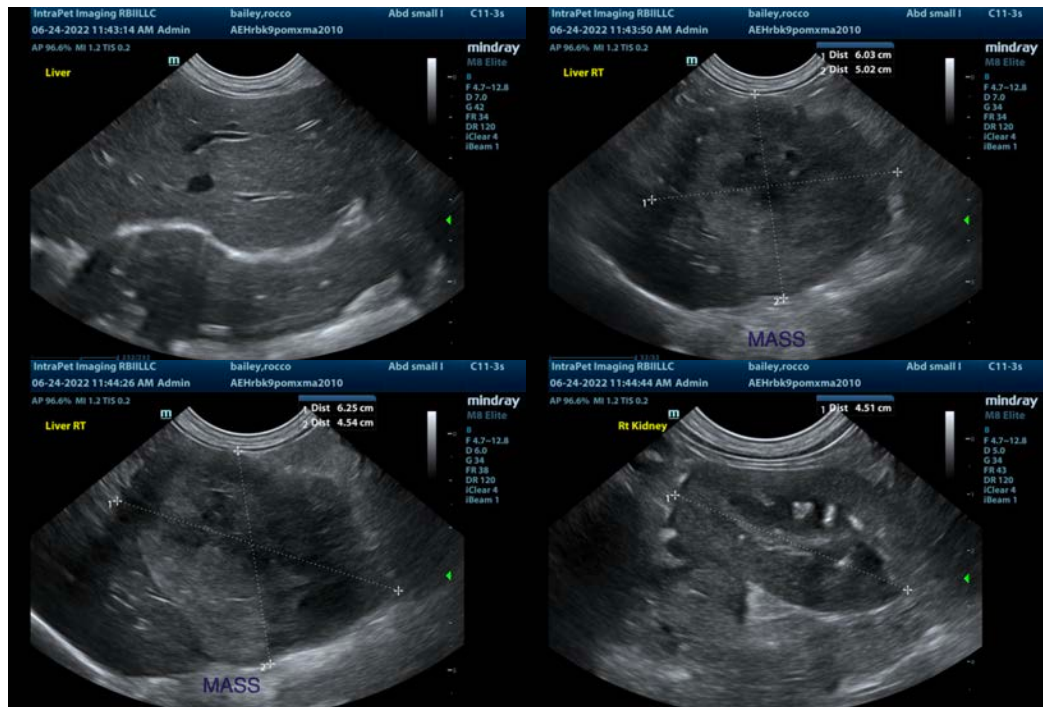
There is a large focal mass lesion on the liver. This is most consistent with a primary hepatic mass, many of which has a relatively benign nature, and if they can be removed surgically, often have a good long-term prognosis. Recommend a contrast CT scan to further evaluate this lesion for possible surgical removal.

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

It is unclear if the liver lesion is the cause for the current illness, as I suspect this has been a chronic problem, and less likely to cause acute symptoms. Of more concern could be the shadowing material within the gastric lumen. Correlate with abdominal radiographs and the history to try and determine if gastric foreign material is possible.

There is non-formed fecal material visualized within the colon, showing moderate distention. This could be indicative of impending diarrhea and due to gastroenteritis.

Additionally, the prostate is large and cystic. Recommend a urinalysis and culture, and neutering to try to prevent progression/infection of the current prostatic disease.





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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