

**DATE PRESENTING CLINICAL SIGNS**

6/9/22

On 6/2-6/3, Pet was at ER for a sudden episode of collapsing. Fast scan showed no blood but an irregular splenic margin +/- a mass was noted. Pet was also mildly anemic and had lower platelets, with no other significant findings.

**PATIENT**

Baxter Long-Smith

Current Medications: None.

Lab Results: On 6/2-6/3 IOF, CBC, and electrolytes were run with these abnormalities: RBC 5.2 (5.65-8.87), HCT 32.2 (37.3-61.7)

**SPECIES**

Canine

ALP 383 (23-212).

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

**BREED**

Corgi X

Stat Report: Not requested.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****SEX**

Neutered 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**

2/14/14

The prostate is normal in size (0.65 cm) and shape for this neutered male dog. The parenchyma is homogenous and the external margins are smooth. The prostatic urethra appears normal with no evidence of irregularity, invasion, mass effect or calculi.

**WEIGHT**

19 Pounds

The left kidney has a normal shape and size (4.45 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**INTERPRETED BY**

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

The right kidney has a normal shape and size (4.43 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**IMAGING PERFORMED BY**

Andi Parkinson RDMS

**Adrenal Glands**

The left adrenal gland is borderline large in size measuring 0.35 cm at the cranial pole, 0.72 cm at the caudal pole, and 2.02 cm in length. It is observed in its normal position cranial to the left renal artery. It is somewhat abnormal in appearance in that the caudal pole is rounded and enlarged as compared to the cranial pole. This creates the impression of an isoechoic nodule measuring approximately 0.74 cm x 0.60 cm. There is no evidence of vascular involvement or surrounding inflammation/fluid.

**HOSPITAL NAME**

Banfield Columbia

**REFERRING VET**

Dr. Landon

The right adrenal gland is normal in size measuring 0.64 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.

**INVOICE**

38576

**Spleen**

The spleen is subjectively normal in size and the echotexture is homogenous. The splenic capsule is smooth with no visible irregularities. Rare discrete focal hyperechoic, perivascular parenchymal abnormalities are present. The appearance of these lesions is most consistent with benign splenic myelolipomas. The blood flow through the hilus and splenic parenchyma appears normal.

### ***Liver***

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is homogenous echotexture. 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 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. 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.

## **ULTRASONOGRAPHIC FINDINGS**

- Isoechoic, rounded nodular appearance to the caudal pole of the left adrenal gland – Left adrenomegaly could be consistent with neoplasia (e.g., adenoma, carcinoma, pheochromocytoma), hyperplasia, inflammation, other.
- Hyperechoic nodules visualized within the splenic parenchyma – These nodules have the appearance of benign myelolipomas. A fine needle aspirate would be necessary to confirm.
- Moderate gallbladder debris – The significance of the aggregated gallbladder sludge is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting.

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

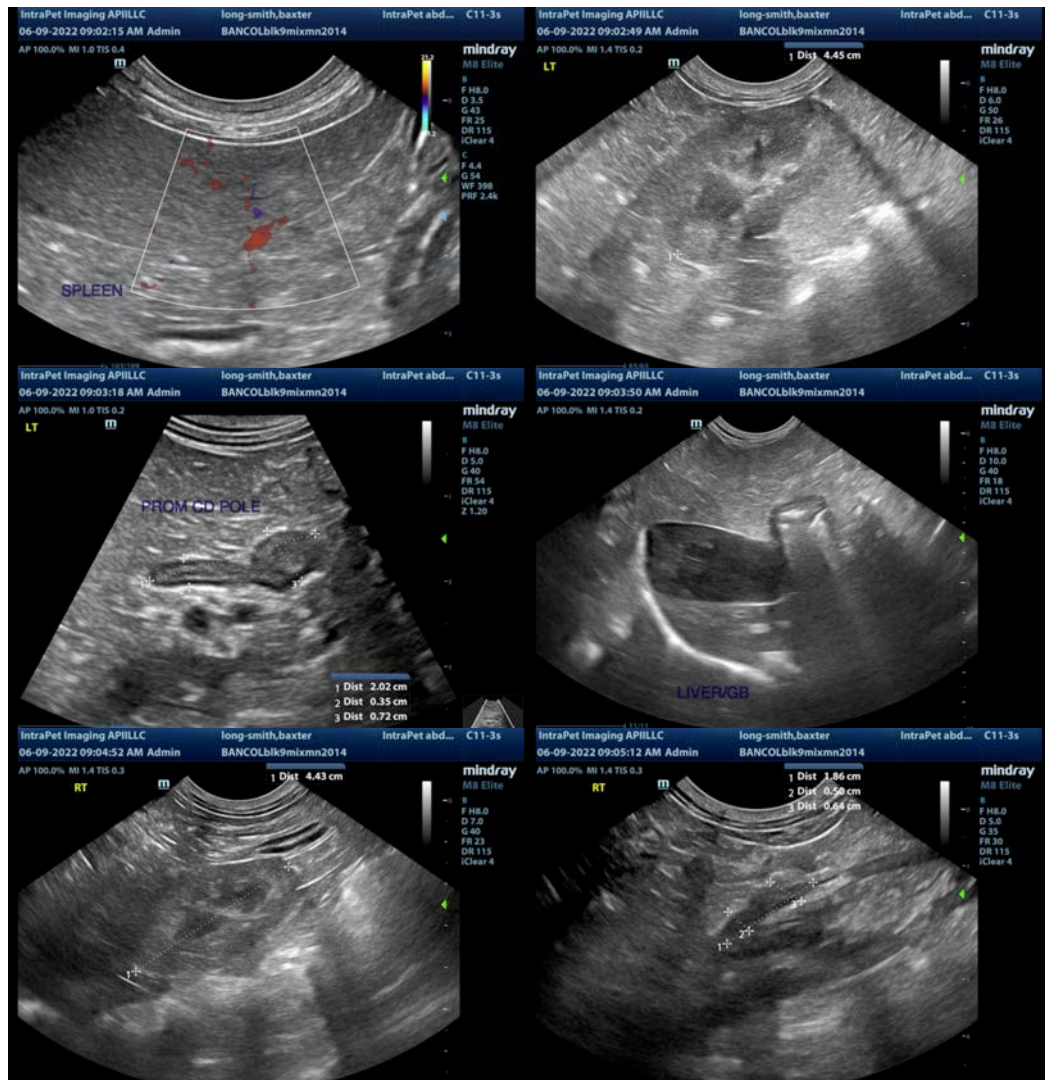
The significance of the adrenal lesion is uncertain, as even the enlarged asymmetrical caudal pole is not severely enlarged. This could represent normal anatomic variation, an "incidentaloma", a benign adenoma, or something more concerning. Initially, I would recommend a blood pressure evaluation, as a pheochromocytoma could cause episodic collapse. If blood pressure is high on evaluation, then consider catecholamine testing for a pheochromocytoma. If this patient has symptoms of Cushing's disease, you could consider adrenal function testing to determine if there is a cortisol excess. If these things are present, then I

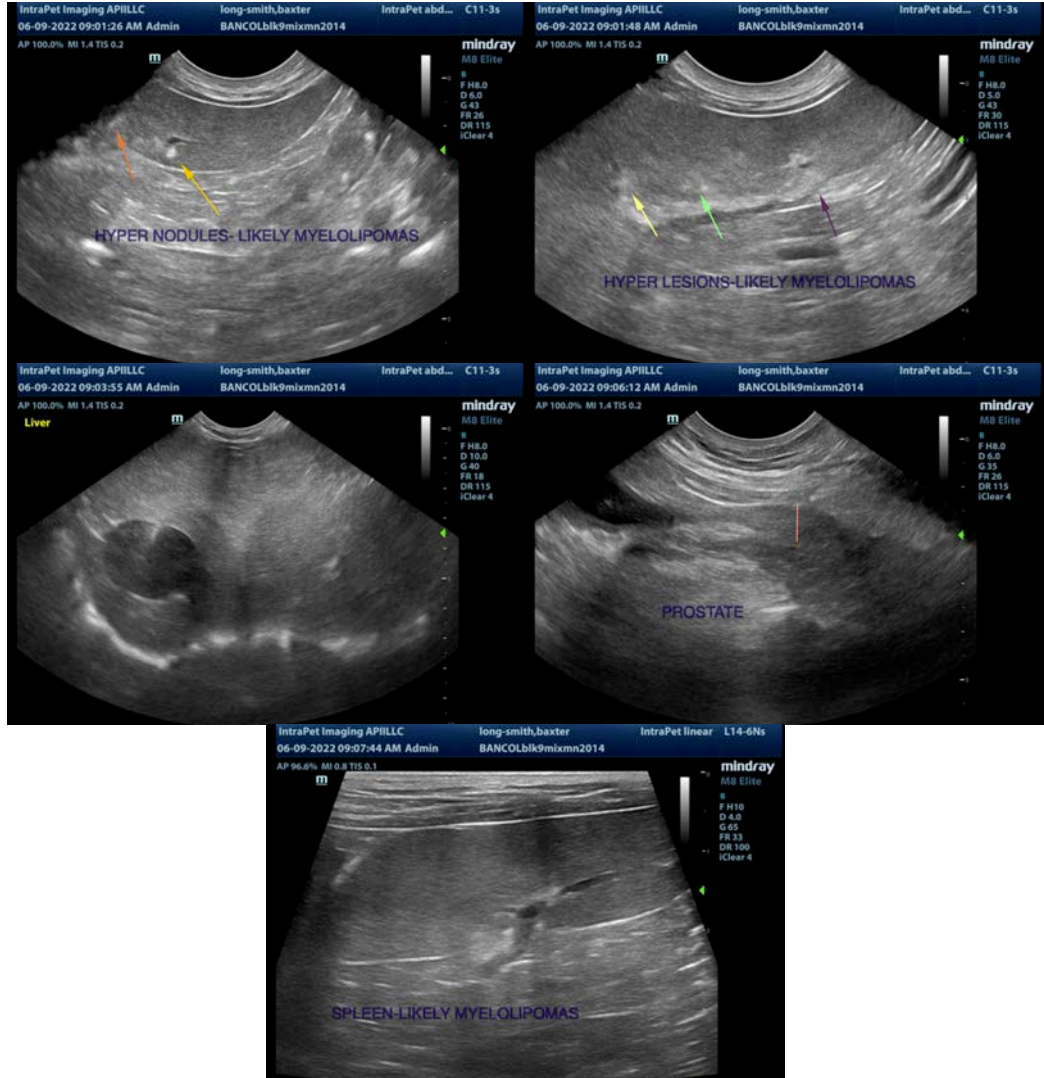
would be more concerned about the lesion, and consider advanced imaging (contrast CT scan) and possible left-sided adrenalectomy. If these things are not present, then I would consider close continued monitoring with ultrasound (recheck in 2-3 months), as some aggressive adrenal tumors can grow rapidly.

There are hyperechoic foci visualized within the splenic parenchyma. Most of these appear adjacent to vasculature and have the appearance of a benign myelolipoma. In general, hyperechoic nodules are less concerning in the spleen, but a fine needle aspirate is necessary to confirm that this is not a neoplastic lesion (seems unlikely).

There is some moderate debris within the gallbladder. At this time, it is reasonable to monitor with ultrasound. There is a mild ALP elevation, so prophylactic Ursodiol is another option.

An obvious cause for the collapse episode is not visualized. Consider cardiac disease, neurologic disease, a hypertensive crisis, heat stroke, 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.

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