

**DATE PRESENTING CLINICAL SIGNS**

8/16/23

This will be to get a good overall look at the abdomen, but specifically looking to see if adrenal tumor vs adrenal hypertrophy. This will also further confirm the Cushings

PATIENT

Lacey Wolf

Current Medications: Vetoryl 10 mg po bid started 6/2/23

Lab Results: Baseline Cortisol 7.6 was 7.2 / 18.8 pre tx. 1Hour Post Cortisol 15.7 was 14.3 / 47.1 pre tx

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Stephanie Warga RDCS, RVT.

SPECIES

Canine

BREED

Jack Russell

SEX

Spayed Female

AGE

6/1/13

WEIGHT

19.1 Pounds

INTERPRETED BYBeth Johnson, DVM
DACVIM**HOSPITAL NAME**

Rolling Hills AH

REFERRING VET

Dr. Gividen

INVOICE

44724

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**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.

The left kidney has a normal shape and size (4.65 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 (5.17 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 large and irregular, measuring 0.53 cm at the cranial pole, 1.0 cm at the caudal pole, and 2.42 cm in length. It is observed in its normal position cranial to the left renal artery. It is abnormal in appearance in that there is a hyperechoic nodule in the caudal pole measuring 0.94 cm x 0.76 cm. No evidence of vascular invasion visualized.

The right adrenal gland is large and slightly irregular, measuring 1.27 cm at the cranial pole, 0.83 cm at the caudal pole, and 2.69 cm in length. 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. There is a focal hyperechoic lesion at the periphery of the spleen measuring 0.38 cm x 0.35 cm, most consistent with a benign myelolipoma.

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 mild 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. Duodenum wall measures 0.48 cm. Jejunum wall measures 0.28 cm. 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 prominent and mottled compared to the surrounding isoechoic 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

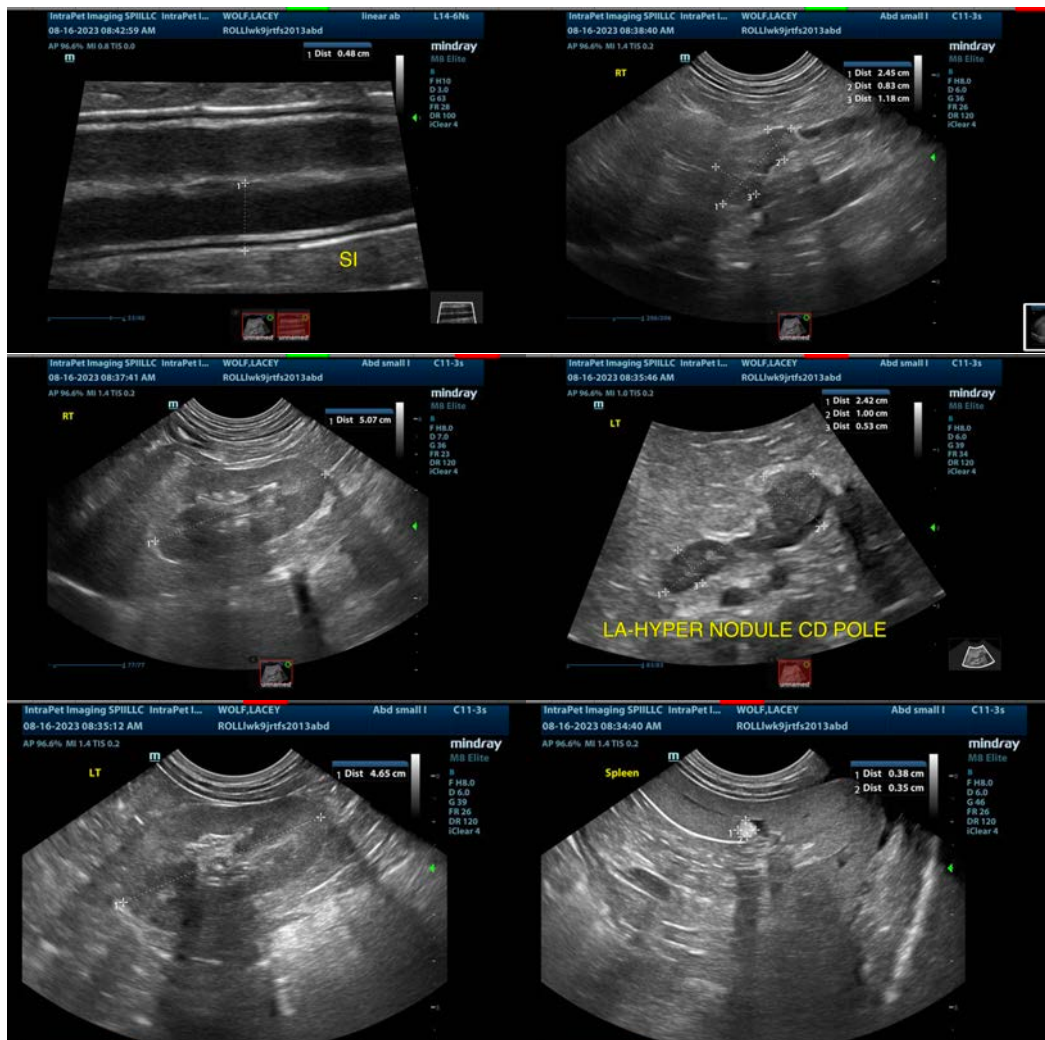
- Hyperechoic nodule in the caudal pole of the left adrenal – Adrenomegaly could be consistent with neoplasia (e.g., adenoma, carcinoma, pheochromocytoma), hyperplasia, inflammation, other.
- Hyperechoic foci visualized in the spleen – Findings are most consistent with a benign myelolipoma.
- Prominent, mottled pancreas – The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.
- Mild gallbladder debris – The significance of the aggregated gallbladder debris is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting but seems unlikely to be causing a current issue. Recommend continued monitoring.
- Large, slightly irregular right adrenal gland – This could be consistent with hyperplasia, early neoplastic disease, etc.

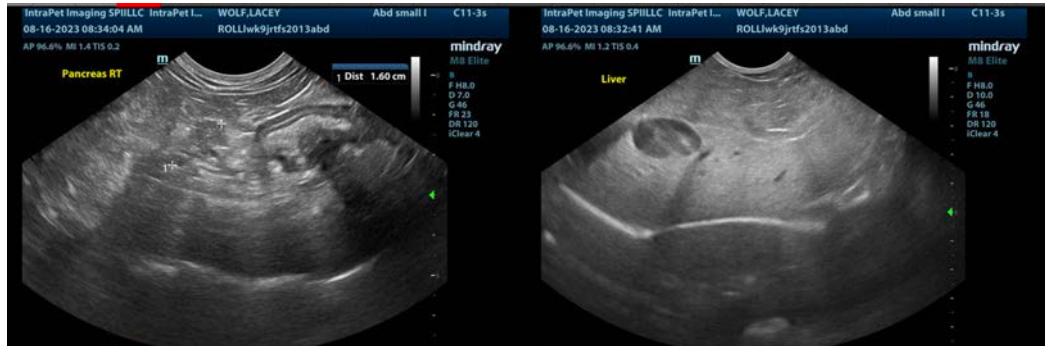
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is a hyperechoic nodule visualized in the caudal pole of the left adrenal gland. This is relatively small

and currently most consistent with a benign lesion (hyperplasia, adenoma, etc.), although an early neoplastic lesion cannot be definitively ruled out. Additionally, the right adrenal is large, making the possibility of concurrent pituitary dependent disease possible. Recommend blood pressure evaluation. If hypertension is present, recommend catecholamine testing, looking for the presence of a pheochromocytoma. One option would be to medically manage for pituitary dependent hyperadrenocorticism with close continued monitoring of the left adrenal nodule. Alternately, you could consider a contrast CT scan to better evaluate these regions and consider surgical removal.

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





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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