

IMAGING PERFORMED BY

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DATE PRESENTING CLINICAL SIGNS

6/17/22 Two doses of chemo- significant side effects so owner discontinued h/o Mast Cell Tumor (SQ)-- fall 2021; Complete excision.

PATIENT Bloodwork and radiographs every few months to ensure no recurrence/changes Spleen enlarged on radiographs.

Lucy Yingling

Current Medications: None started.

Lab Results: Normal.

SPECIES Date of Previous IntraPet Ultrasound: No previous.

Canine Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

BREED ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Boxer X

Urinary System

The urinary bladder is moderately/mildly distended with anechoic urine. The Bladder wall appears mildly diffusely thickened and irregular, particularly in the apical portion. The area of the trigone, ureteral papillae and proximal urethra appear free of any mass lesions or calculi. Findings are most consistent with bacterial cystitis or lack of urine distention.

AGE

5/1/12

The left kidney has a normal shape and size (6.63 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.

WEIGHT

50 Pounds

The right kidney has a normal shape and size (7.02 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)

Adrenal Glands

The left adrenal gland is borderline large in size measuring 0.57 cm at the cranial pole, 0.85 cm at the caudal pole, and 2.8 cm in length. It is observed in its normal position cranial to the left renal artery. It is somewhat irregular in appearance in that there is a slightly hyperechoic mottled region in the caudal pole measuring 1.14 cm x 0.60 cm, possibly consistent with an ill-defined nodule. There is no overt evidence of vascular invasion.

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Andi Parkinson RDMS

The right adrenal gland is normal/"plump" in size measuring 0.86 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.

HOSPITAL NAME

Timonium AH

REFERRING VET

Dr. McMichael

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

38844

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 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 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 prominent and hypoechoic as 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

- Borderline “plump” adrenals with an ill-defined hyperechoic nodule in the caudal pole of the left adrenal gland – The bilateral adrenomegaly could be consistent with bilateral hyperplasia (e.g., secondary to pituitary-dependent hyperadrenocorticism), bilateral infiltrative neoplasia, inflammatory adrenal disease, other. Correlation with clinical findings is recommended.
- Prominent, hypoechoic pancreas – The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.
- Mildly irregular urinary bladder wall – most consistent with lack of urine distention or cystitis. Recommend a urinalysis and culture.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Today’s scan is largely normal (with some mild changes discussed below). There is no overt evidence of metastasis or metastatic lesions observed.

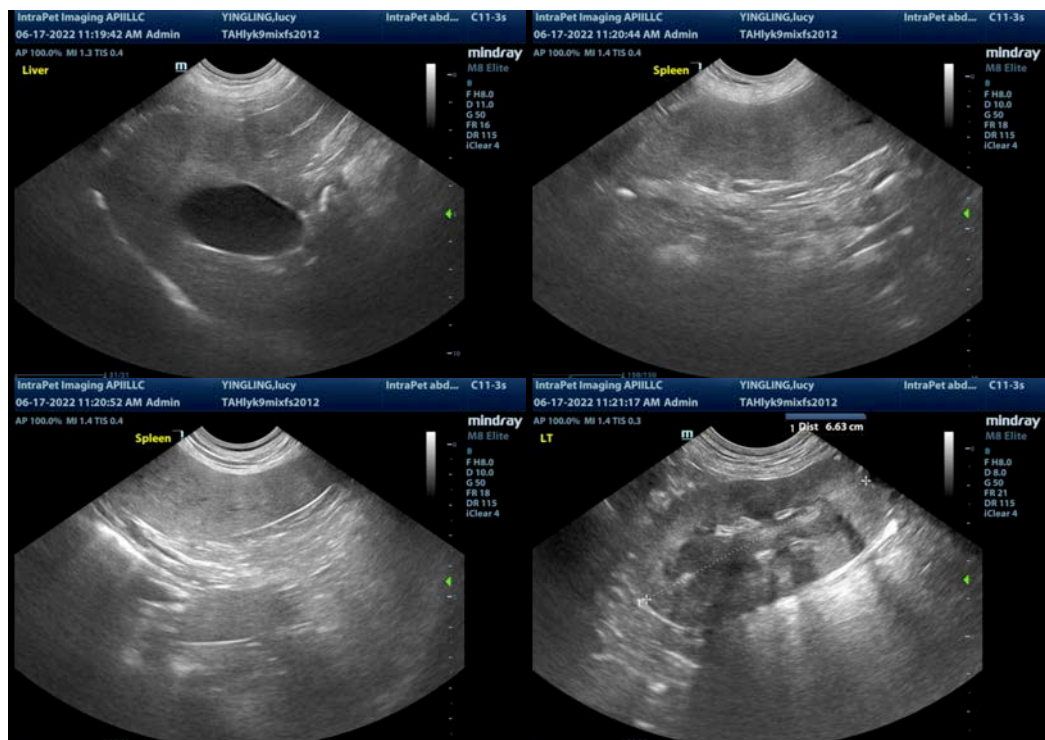
Both adrenals appear somewhat “plump”, but this is a larger dog, so this could be appropriate. Additionally, there is an ill-defined hyperechoic region in the caudal pole of the left adrenal gland.

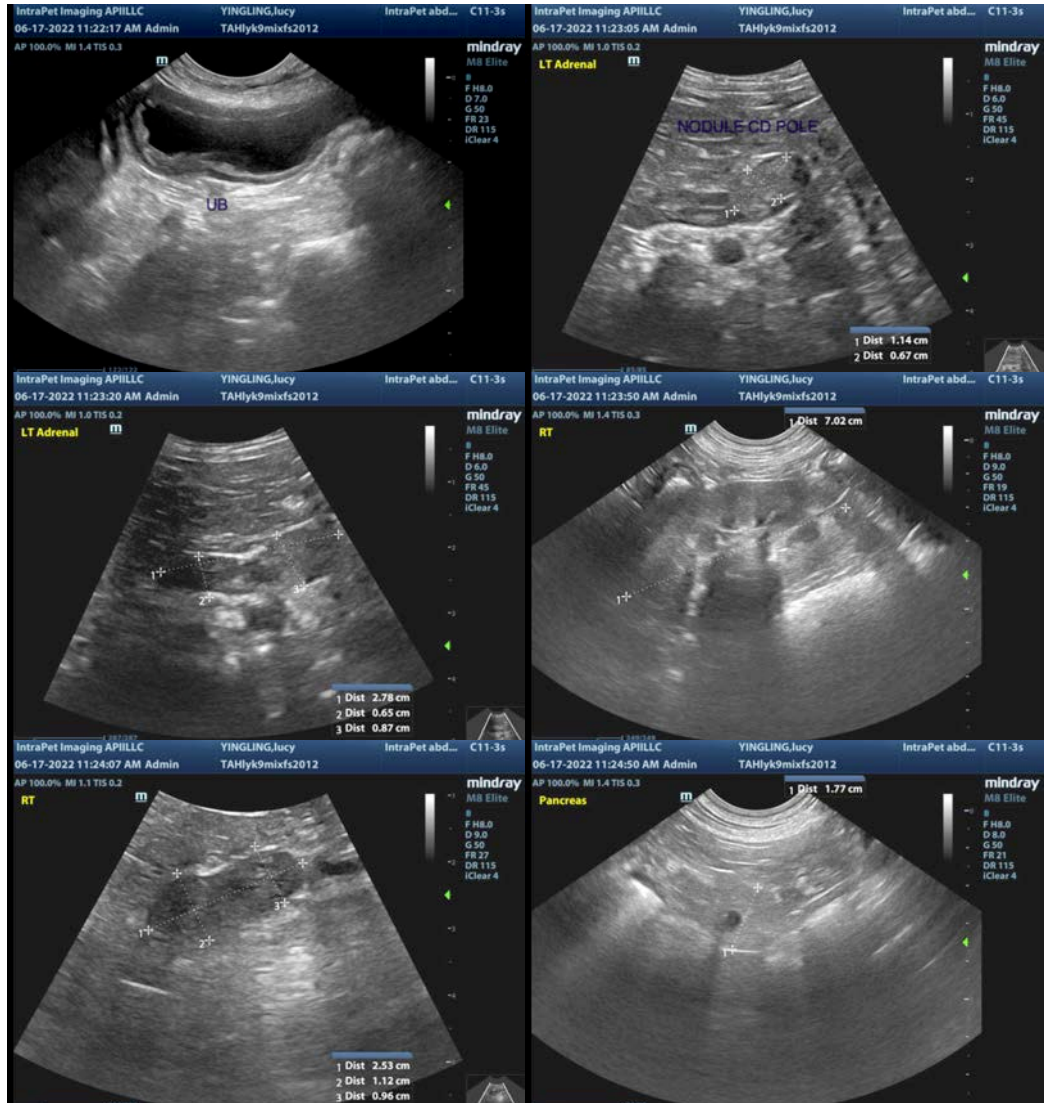
There is nodule present on the left adrenal gland. This nodule is relatively small and is not deforming the adrenal gland significantly and doesn’t appear to have any evidence of vascular invasion. These nodules can be benign or malignant and can secrete hormones or be non-active. Options moving forward include:

- If signs of cushings are present, consider adrenal function testing. I prefer an ACTH stimulation test combined with an adrenal panel to the University of Tennessee's endocrine lab to look for atypical adrenal hormones as well as cortisol. (other testing can suffice)
- If adrenal dependent cushings is suspected and supported by adrenal function testing consider medical therapy with lysodren or trilostane or consider surgical removal (recommend referral to a board certified veterinary surgeon and possible pre op CT)
- Recommend blood pressure evaluation-if hypertensive consider testing catecholamine levels for a possible pheochromocytoma
- If no symptoms of cushings are present, consider either referral for surgery or continued monitoring with ultrasound (in 3-4 months).
- Many of these nodules can be benign and incidental in nature, unfortunately that is difficult to determine with a single ultrasound.

As the adrenal gland itself is barely enlarged, this lesion trends towards a more benign appearance, but close monitoring is warranted.

The pancreas is somewhat hypoechoic and prominent. With a lack of clinical signs reported, I suspect this is consistent with age related remodeling, 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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