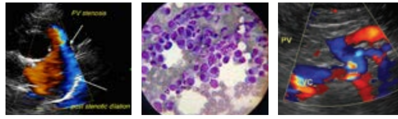


DATE
4/4/23

PATIENT
Frank Wall-Blount

SPECIES
Canine

BREED
Boxer X

SEX
Neutered Male

AGE
3/28/10

WEIGHT
50 Pounds

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

HOSPITAL NAME
Timonium AH

REFERRING VET
Dr. Stephens

INVOICE
46371

PRESENTING CLINICAL SIGNS

Presented for a dermal mass and sent pre-op blood panel. Mild azotemia (SDMA 20, CREA 1.8) no urine sample available. Mild non-regenerative anemia, HCT 37.8 (was 43.8 in 2021).

Current Medications: None listed.
Lab Results: See attached.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Andi Parkinson, BS, RDMS.

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 visualized areas of prostate and surrounding tissue appear normal. Unfortunately, the prostate is not fully visualized likely due to its intrapelvic location. Correlate with rectal exam findings.

The left 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.

The right kidney has a normal shape and size (5.82 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 somewhat large and irregular in shape, measuring 0.52 cm at the cranial pole, 1.26 cm at the caudal pole, and 3.19 cm in length. It is observed in its normal position cranial to the left renal artery. It is somewhat irregular in that the caudal pole is significantly more enlarged than the cranial pole. There is no focal change in echogenicity demarcating a discrete mass effect, but the caudal pole is likely abnormal. There is no evidence of vascular invasion visualized.

The right adrenal gland is normal in size but slightly irregular in appearance. The cranial pole measures 0.84 cm, caudal pole measures 0.52 cm, length measures 2.34 cm. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is slightly irregular in appearance in that there is a very subtle ill-defined hyperechoic region in the caudal pole measuring 0.74 cm x 0.54 cm, which does not appear to deform the shape of the adrenal gland. No evidence of vascular invasion visualized.

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 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 mild and primarily anechoic. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach a moderate amount of shadowing gas/ingesta. 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

- Enlarged caudal pole of the left adrenal – Adrenomegaly could be consistent with neoplasia (e.g., adenoma, carcinoma, pheochromocytoma), hyperplasia, inflammation, other.
- Ill-defined hyperechoic region on the caudal pole of the right adrenal – This could represent hyperplasia, an early neoplastic lesion, etc.
- Moderate shadowing material/gas in the gastric lumen and small intestines – There is some shadowing material visualized within the stomach and a moderate amount of gas. Additionally, the small bowel appears somewhat “gassy” with shadowing air. Correlate these findings with the feeding history and radiographs. This could be consistent with a recent meal, aerophagia, ingested foreign material, etc.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The significance of the abnormalities in both adrenals is unknown. The caudal pole of the left adrenal gland is large, but there is not a discrete mass effect (change of echogenicity, irregularity, etc.). This could represent focal hyperplasia, and early mass effect, etc. Additionally, on the left kidney there is a subtle hyperechoic irregular region with no deformation of the adrenal. Likewise, this could represent hyperplasia or an early

neoplastic lesion, but the appearance trends towards a benign lesion.

- Recommend a blood pressure evaluation. If this patient is hypertensive, consider catecholamine levels.

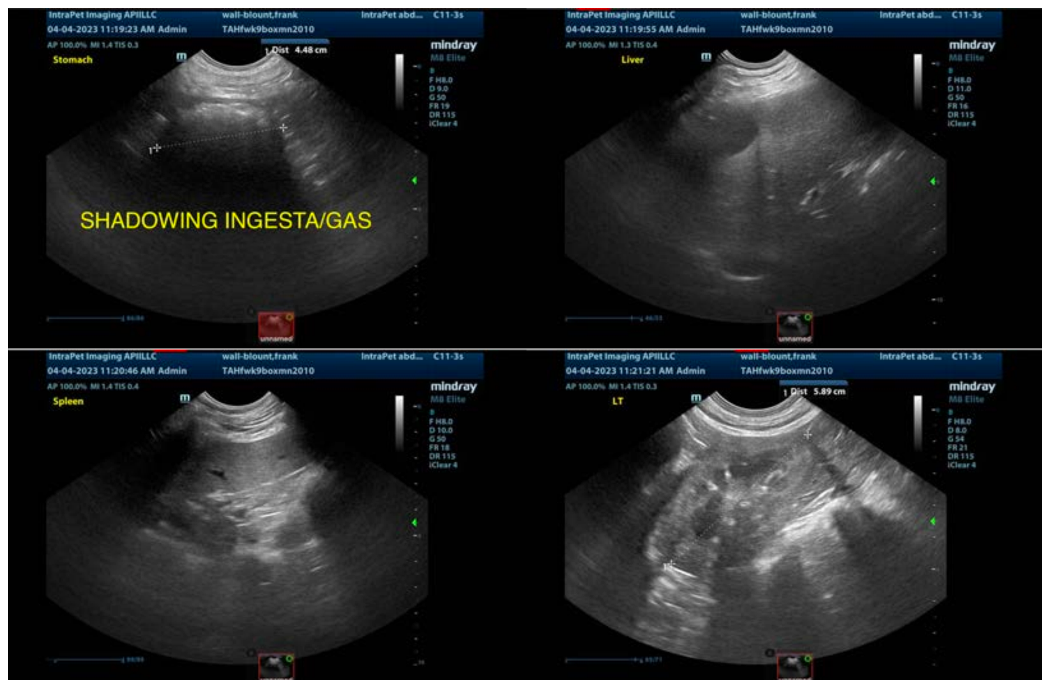
- If signs of Cushing's are present, you could consider adrenal function testing.

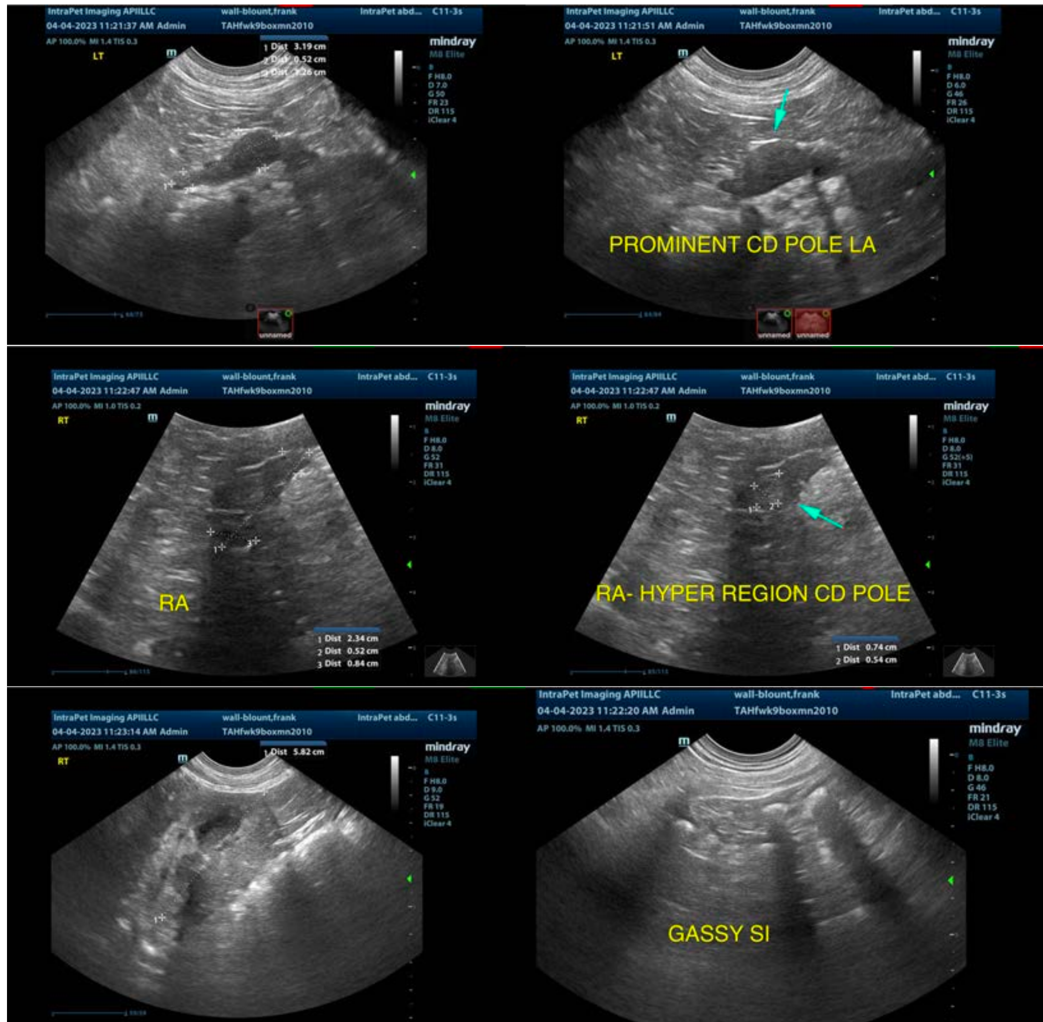
- Recommend continued monitoring of the adrenal glands with serial ultrasound or a contrast CT scan to obtain more information (recheck in 8-12 weeks initially).

There is a moderate amount of gas and ingesta visualized in the stomach. This could represent an unfasted patient. If the patient was adequately fasted, then consider the possibility of ingested foreign material, aerophagia due to anxiety, etc.

I think it is very likely that the two adrenal lesions at this time are incidental and unrelated to the anemia reported. No focal lesions are visualized to explain the anemia. Consider a pathologist review, looking for any evidence of spherocytes, atypical cells, etc., a rectal exam looking for any evidence of melena, and close continued monitoring.

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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)
kathleen.sennello@sonopath.com