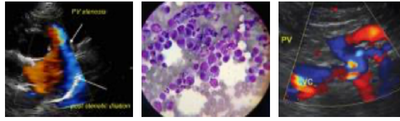


DATE
1/3/2022

PATIENT
Hasty Kane

SPECIES
Canine

BREED
West Highland Terrier

SEX
Female, spayed

AGE
5/22/2008

WEIGHT
15 lbs.

INTERPRETED BY
Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)

HOSPITAL NAME
Warm & Fuzzy VC

REFERRING VET
Dr. Williams

INVOICE
12764

PRESENTING CLINICAL SIGNS

History: Presented for routine bloodwork to pursue dental and hypoglycemia noted, rechecked two weeks later - still low, resting cortisol and insulin panel performed - cortisol level not low, insulin panel consistent with insulinoma, also elevated ALKP. Patient has three legs, allergies.

Current Medications: Started Prednisone 1.25mg po BID, went with lower than the usually prescribed 0.25mg/kg BID since she only has three legs so trying to limit side effects.
Lab Results: (12/3/21) ALKP 1190, BG 40, Na 145, K 5.4. (12/17/21) BG 43, Cortisol 8.1, Insulin: glucose ratio 413. Attached separately.
Date of Previous IntraPet Ultrasound: No previous IntraPet scans.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Rachel Brilhart, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

The left kidney is normal size (4.95 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with moderate loss of corticomedullary distinction. Moderate pyelectasia is present (0.58 cm in the longitudinal plane). There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal size (4.91 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with moderate loss of corticomedullary distinction. Moderate pyelectasia is present (0.46 cm in the longitudinal plane). There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is mildly enlarged (0.62 cm at cranial pole) (0.70 cm at caudal pole) (1.75 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

The right adrenal gland is mildly enlarged (0.61 cm at cranial pole) (0.82 cm at caudal pole) (2.39 cm in length) with a normal shape. The parenchyma is slightly heterogeneous in appearance with some loss of glandular detail. The phrenicoabdominal vein and surrounding vasculature are normal.

Spleen

The spleen is subjectively normal in size (1.34 cm in width at the level of the hilus) with normal curvilinear peripheral contours. The parenchyma is diffusely mottled in appearance. At least 2 ill-defined hypoechoic nodules are observed, the largest measuring 0.67 cm in diameter. Splenic vasculature is normal with no evidence of thrombosis.

Liver
The liver is subjectively prominent in size with swollen peripheral contours. The parenchyma is isoechoic relative to the spleen and diffusely mottled in appearance. No distinct focal lesions are observed. Vascular and biliary tracts are of normal volume with no evidence of congestion. The gall bladder lumen is distended. The wall is normal in thickness. A large amount of aggregated echogenic suspended debris/sludge is observed within the lumen. The cystic and common bile ducts are normal/not seen.

Gastrointestinal
The gastric lumen is moderately distended with ingesta. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The small intestinal lumen is segmentally dilated with gas and chyme. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. No obstructive disease is noted.

Pancreas
A portion of the pancreas is obscured by the gastric distention. The left limb is largely isoechoic relative to surrounding omental fat. No obvious pathology is seen. See *Other*.

Free Abdomen
There is no evidence of free fluid.

Lymph Nodes
See *Other*

Other

A brief echocardiogram reveals no evidence of pericardial effusion.

A 3.76 x 2.66 cm irregular, lobulated, slightly heterogeneous mass is observed in the right cranial quadrant. Surrounding mesentery is mildly hyperechoic.

ULTRASONOGRAPHIC FINDINGS
Primary Findings:

- Mass effect in the right cranial quadrant, the origin of which is unclear. It may be arising from pancreas, portal lymph node, mesentery, other. Regional peritonitis is present.

- The gallbladder changes could be secondary to a developing mucocele, cholestasis, or secondary to fasting. Alternatively, extraluminal common bile duct obstruction (with subsequent bile stasis) by the mass in the right cranial quadrant cannot be excluded.

Secondary Findings:

- Mild bilateral adrenomegaly.

- Bilateral age-related renal changes with pyelectasia.

- The hepatic parenchymal changes could be consistent with benign age-related changes (i.e., vacuolar hepatopathy, regenerative nodular hyperplasia). Alternatively, metastatic disease and/or an inflammatory process cannot be excluded.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

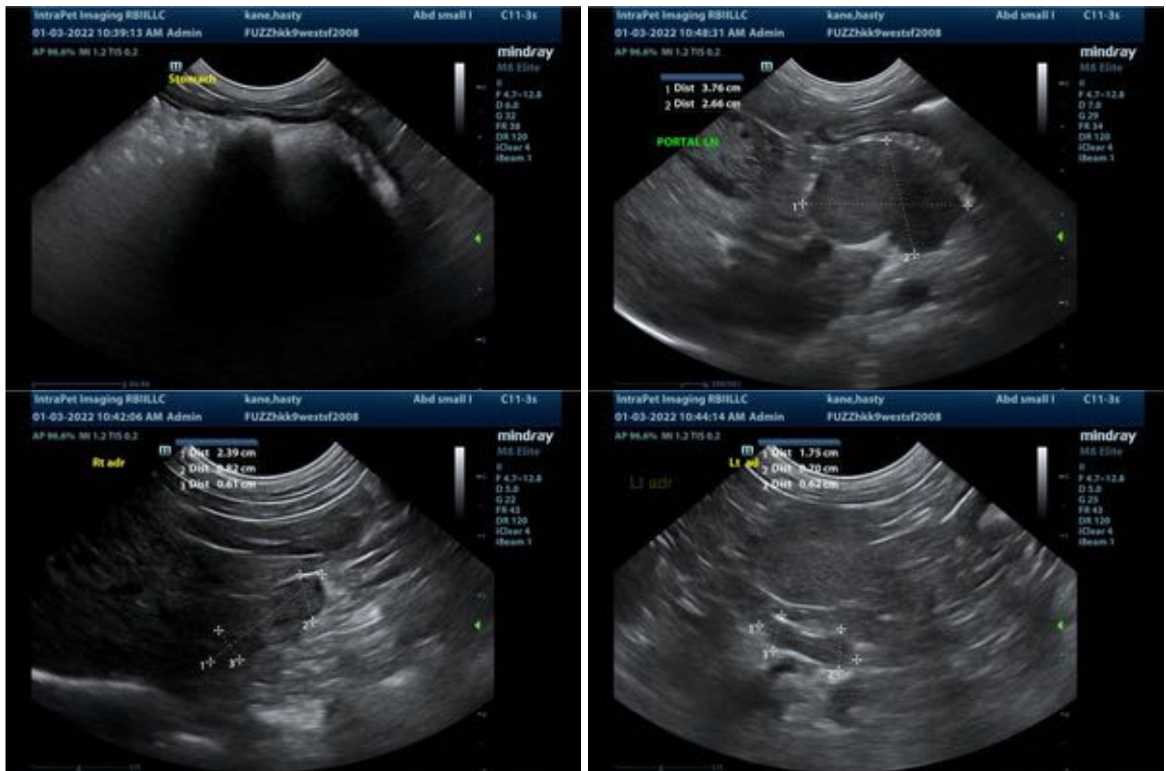
- Three-view thoracic radiographs are recommended to assess for pulmonary metastases.

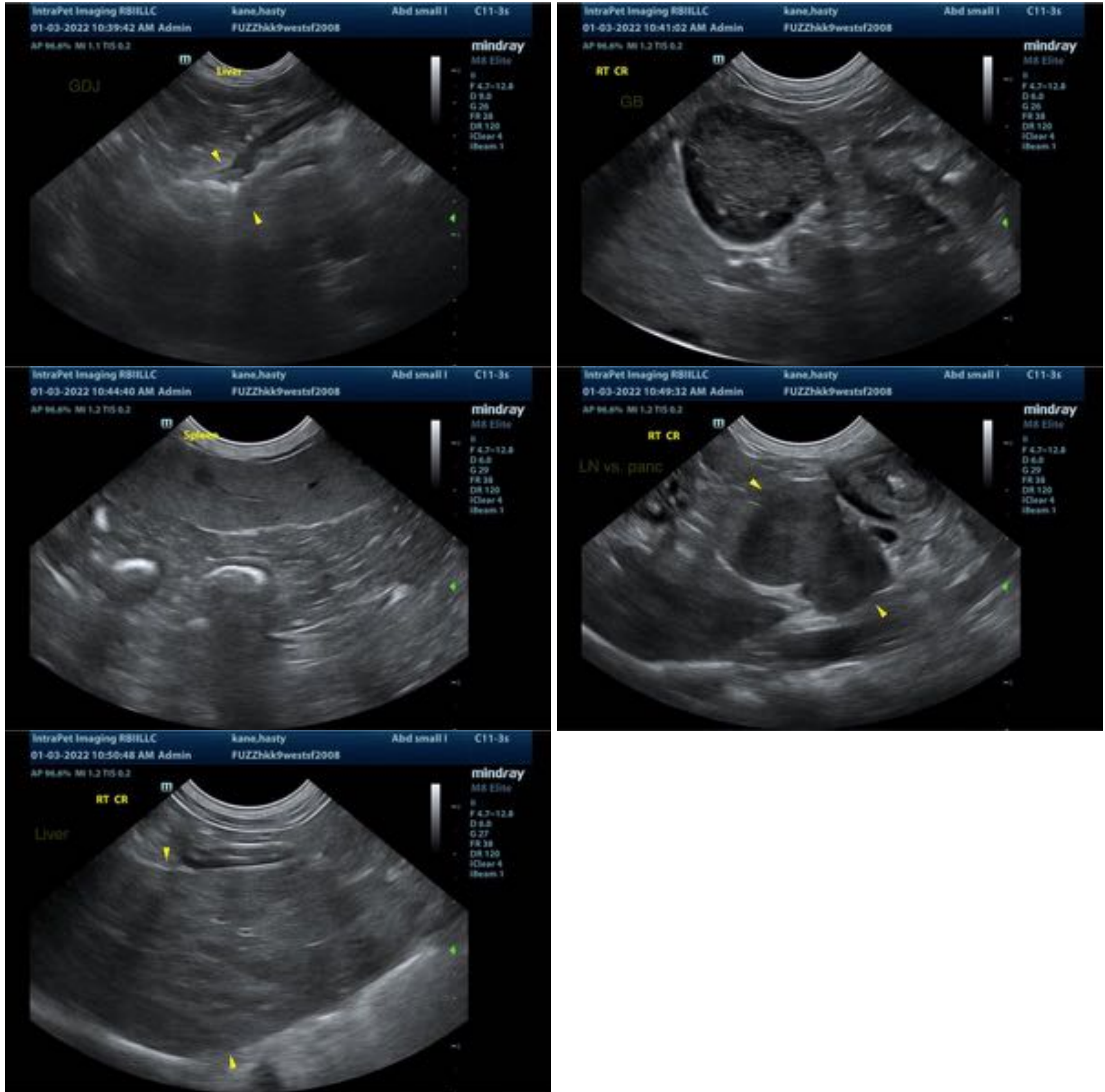
- If accessible, a fine needle aspirate of the mass in the right cranial quadrant is recommended (if clotting status is appropriate). A 25-gauge needle should be used. If not accessible, consider an abdominal exploratory with mass removal and submission for histopathology. A liver biopsy should also be obtained at the time of surgery and the gallbladder should be assessed for patency. If surgery is pursued, referral to a board-certified surgeon is recommended due to the potential for perioperative complications. An abdominal CT scan may be useful in pre-surgical planning.

- If surgery is not to be pursued, continued medical management for insulinoma is recommended.

- The gallbladder should also be sonographically monitored for the development of a fully-formed mucocele.

- Consider testing for hyperadrenocorticism with a low-dose dexamethasone suppression test or ACTH stimulation test if clinical signs (i.e., PU/PD) develop in the future.





The information and recommendations provided are based on the images presented by the referring veterinarian. 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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