

**DATE**

6/13/22

PRESENTING CLINICAL SIGNS

History: Straining to defecate, drinking large amounts of water. Vomiting. Moderate dehydration, depressed and tense abdomen on PE.

PATIENT

Dixie Whitelaw-Klein

Lab Results: Attached.

Radiographs: Concerning for possible mass.

Date of Previous IntraPet Ultrasound: No previous

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Rachel Brillhart, RDMS.

SPECIES

Canine

BREED

Border Collie Mix

SEX

Spayed Female

AGE

4/17/13

WEIGHT

46.8 Pounds

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

Urinary bladder is mildly to moderately distended with anechoic contents. Apical urinary bladder wall is diffusely thick, measuring 0.45 cm in thickness. Enhanced hyperechoic mesentery and fat surrounding the bladder wall. Mucosa is hyperechoic and irregular. No masses or cystoliths are observed. The trigone and visible pelvic urethra are normal thickness with a smooth mucosal surface.

Left kidney is normal is size (5.89 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

Right kidney is normal is size (5.47 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

INTERPRETED BYBeth Johnson, DVM
DACVIM**Adrenal Glands**

The left adrenal gland is plump/swollen. (2.75 cm in length x 0.75 cm at cranial pole and 0.77 cm at caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The right adrenal gland is plump/swollen. (2.98 cm in length x 1.09 cm at cranial pole and 0.79 cm at caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

HOSPITAL NAMEAnimal Emergency
Hospital**Spleen**

Spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

REFERRING VET

Dr. Saubier

Liver

Liver is subjectively enlarged with rounded margins. Parenchyma is heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. Visible vasculature appears normal.

INVOICE

16079

GB is moderately distended with anechoic bile and gravity dependent echogenic sediment. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.

Gastrointestinal

The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is markedly distended with what appears to be ingesta. Fluid absorbing soft material, such as cloth, hair, etc. can't be ruled out but is considered much less likely. Pyloric outflow tract appears patent. Caudal to the stomach, the wall appears to be hypoechoic and thick with some enhanced hyperechoic fat and mesentery in the area.

The visible small intestines are normal in wall thickness and layering (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

Pancreas

Pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

No appreciable free fluid or lymphadenopathy are noted in these images.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Urinary bladder wall changes are most consistent with chronic cystitis. Infiltrative neoplasia cannot be ruled out but is considered less likely given the location and diffuse nature of the changes.
- The bilateral adrenomegaly is consistent with adrenal hyperplasia secondary to pituitary depending hyperadrenocorticism vs normal variant.
- Heterogeneous liver. Differentials for hepatic changes include both benign steroid (vacuolar) hepatopathy or extramedullary hematopoiesis as well as infiltrative round cell or metastatic neoplasia.
- Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.

Secondary Findings

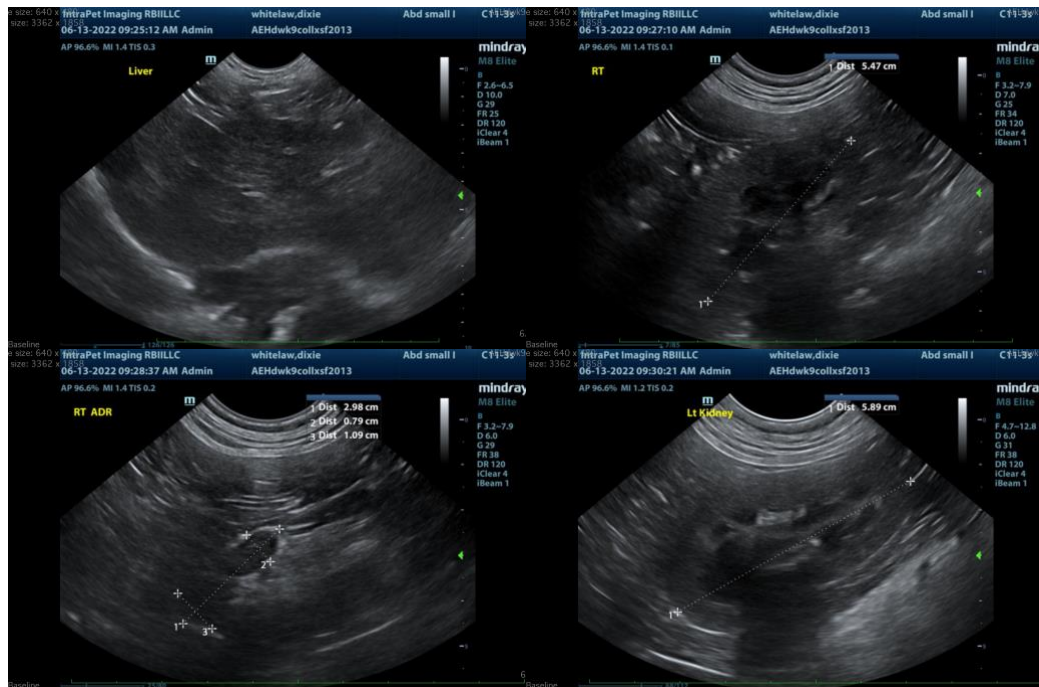
- A markedly distended ingesta with most likely ingesta. As noted above, fluid absorbing soft material, such as hair or cloth can't be ruled out but is considered much less likely. The focal wall thickening and enhanced hyperechoic fat mesentery could be secondary to infiltrative gastric disease, however, focal peritonitis, secondary to mild pancreatitis or gastritis is also possible.

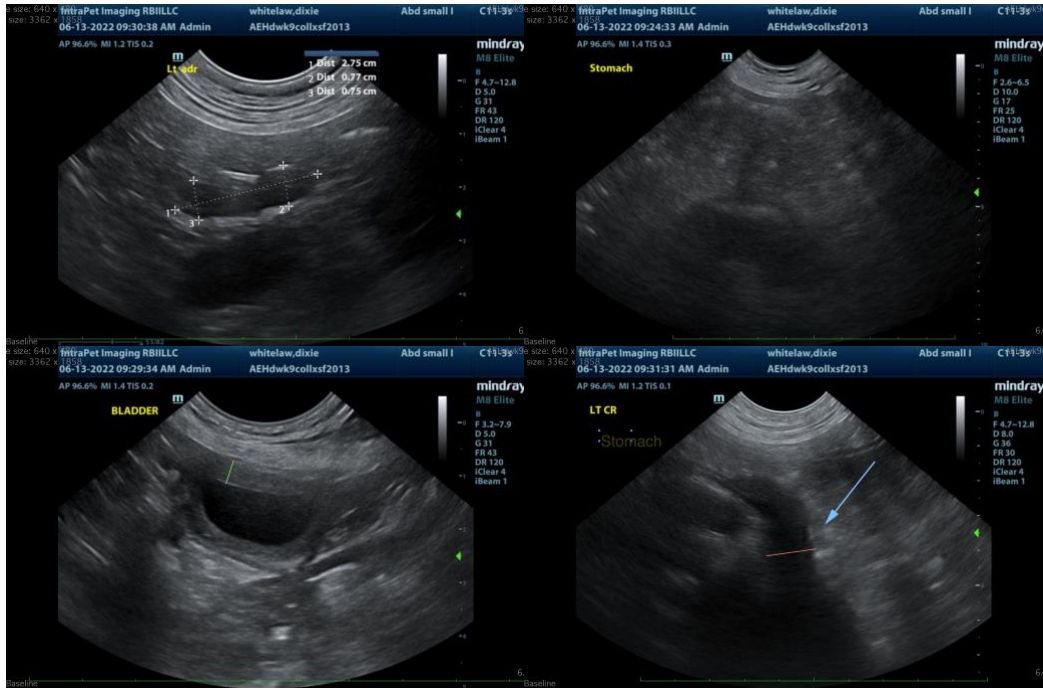
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Recommendations include:

1. A gastrointestinal malabsorption panel, to include TLI, PLI, folate and cobalamin (to Texas A & M GI Laboratory) for further evaluation of gastrointestinal and pancreatic health.
2. Medical management of gastroenteritis/pancreatitis with antiemetics, gastroprotectants and probiotic are recommended with a recheck ultrasound of a fasted stomach, if gastrointestinal signs persist, for further evaluation of the questionable lesion caudal to the stomach.
3. A urinalysis and urine culture are recommended, if not recently evaluated.

The adrenal, liver and gallbladder changes are all suggestive of hyperadrenocorticism. Given this patient's polyuria/polydipsia, hyperadrenocorticism is considered likely, however, further evaluation of hyperadrenocorticism with a low-dose dexamethasone suppression test should be postponed until this patient is no longer clinically ill.





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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