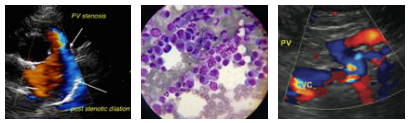


DATE
6/27/22

PATIENT
Patches Boswell

SPECIES
Canine

BREED
Shih Tzu Mix

SEX
Neutered male

AGE
6/24/10

WEIGHT
18.6 lbs

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

HOSPITAL NAME
Animal Emergency Hospital

REFERRING VET
Dr. Roper

INVOICE
31253

PRESENTING CLINICAL SIGNS

P is a referral for HGE. P has not had an appetite in 2 days. O realized P was vomiting and having diarrhea with blood in it. P has been lethargic and has continued to have diarrhea. This morning P went to rDVM this morning and the abdominal radiographs showed a dilated stomach and colon but no obvious obstruction. Bloodwork showed high globulins and ALP:241. At rDVM P had dark bloody liquid diarrhea. O said that P does eat table food.
Current Medications: Buprenorphine, Entyce, Ondansetron, Metronidazole.
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: Rachel Brilhart, 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 prostate is normal in size (0.76 cm) and shape for this neutered male dog. The parenchyma is homogenous and the external margins are smooth. The prostatic urethra appears normal with no evidence of irregularity, invasion, mass effect or calculi.

The left kidney has a normal shape and size (4.54 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.

The right kidney has a normal shape and size (4.8 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.

Adrenal Glands

The left adrenal gland is normal/borderline plump in size measuring 0.75 cm at the caudal pole It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

The right adrenal gland is normal/borderline “plump” at 0.65 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.

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 gallbladder appears somewhat prominent and thickened measuring 0.29 cm. It has a smooth mucosal surface. . Luminal contents are primarily anechoic. The cystic and common bile ducts are normal/not visible.

Gastrointestinal
The stomach is moderately dilated with fluid and irregular shadowing material most consistent with normal ingesta and gas. 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 layering 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 large and hypoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is evidence of regional mesenteric inflammation. Consistent with mild to moderate pancreatitis.

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
PRIMARY FINDINGS:

- Prominent, hypoechoic and mottled pancreas with mildly hyperechoic mesentery surrounding it. The pancreatic changes are most consistent with (mild/moderate/severe) pancreatitis/pancreatic infiltration. I recommend fPLI testing and continued monitoring for improvement or possible development of a pancreatic abscess. Consider FNA if not improving.

- Thickened gallbladder wall. The significance of this is unclears as there is no significant debris in the gallbladder. Correlate with blood work and I recommend continued monitoring.

- Moderate fluid and shadowing material in the gastric lumen. Correlate these findings with feeding history and abdominal radiographs. There is a moderate amount of fluid in the stomach and a small amount of soft shadowing material. This can be consistent with ingesta, but continued monitoring is warranted for the possibility of gastric foreign material. There was no overt obstruction visualized.

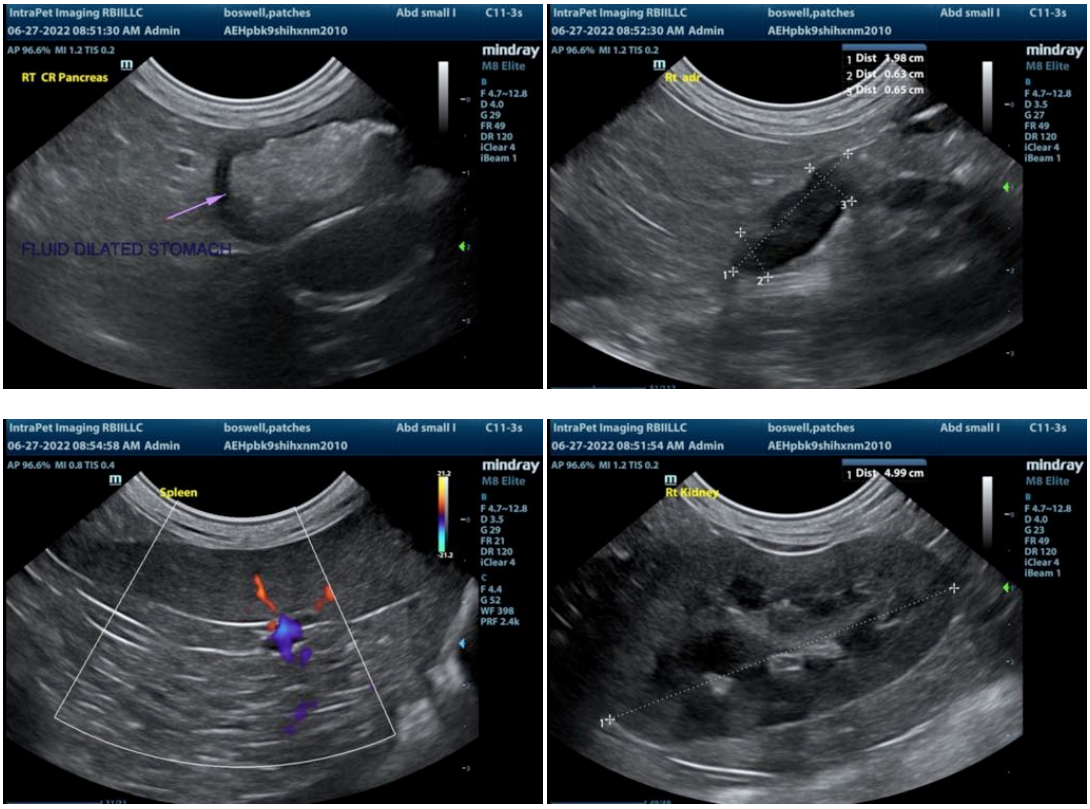
- Borderline “plump” adrenal glands. The bilateral adrenomegaly could be consistent with bilateral hyperplasia (e.g., secondary to pituitary-dependent hyperadrenocorticism), bilateral infiltrative neoplasia, inflammatory adrenal disease, other. Correlation with clinical findings is recommended.

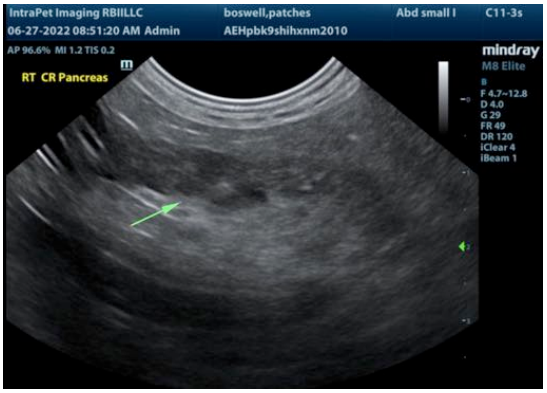
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

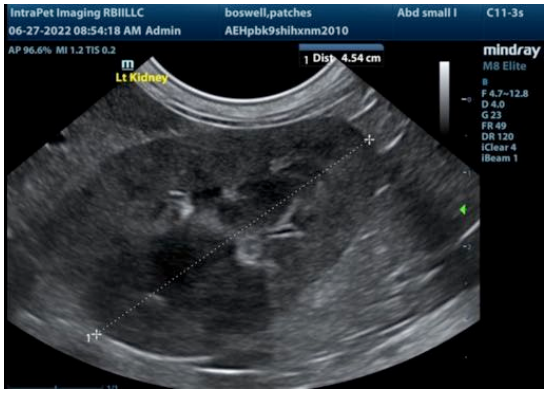
The pancreas is large, prominent and hypoechoic. These findings are most consistent with inflammation of the pancreas and mild to moderate pancreatitis. I recommend medical therapy for pancreatic inflammation and continued monitoring both clinically and with ultrasound. The gallbladder wall is thickened. I suspect that this is secondary to the pancreatitis, but continued monitoring is warranted.

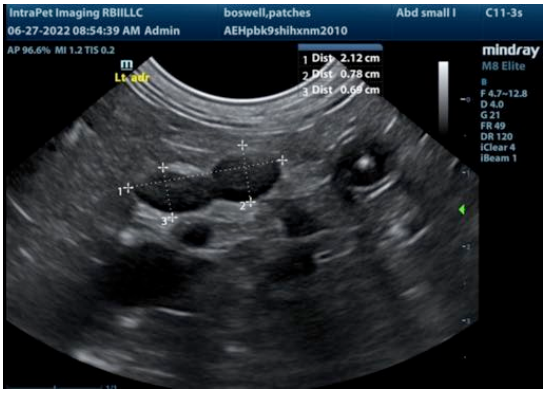
The stomach is dilated with fluid and some shadowing material. I suspect some of this is ileus secodnary to the pancreatitis, but I cannot rule out the possibility of ingested gastric foreign material and a partial obstruction. I recommend close continued monitoring and serial imaging to look for additional evidence of an obstruction. The appearance of this trends towards pancreatitis with ileus.

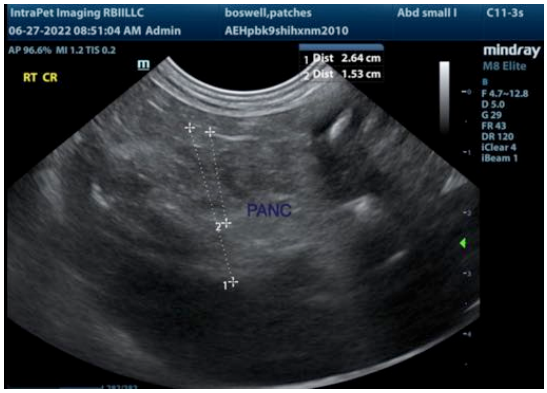
Both adrenal glands appear somewhat hypoechoic and plump. If signs of Cushing’s are present then you can consider adrenal function testing in the future when this patient is feeling better.

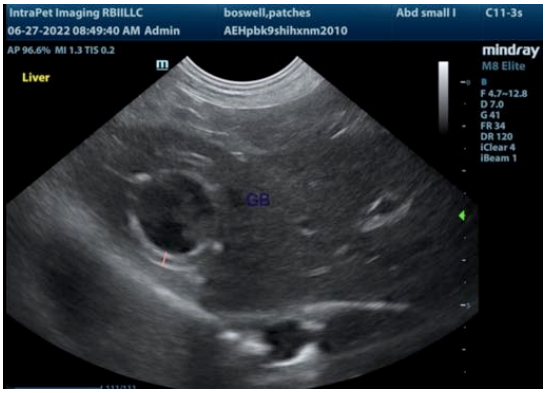












The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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