**DATE**

7/21/22

PRESENTING CLINICAL SIGNS

Chronic watery diarrhea since 7/10, with no response to bland diet, metronidazole, proviable with owner now reporting patient frequently straining or crying out in pain.

Current Medications: Metronidazole-500mg- 1 BID, Lomotil-2.5mg- 1 and 1/2 tabs BID.

PATIENT

Max Jacobs

Radiographs: odd mineralized density cranio-ventral to stomach. no other abnorms.

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.

SPECIES

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**BREED**

German Shepherd

Urinary System

Urinary bladder is adequately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

SEX

Neutered male

Prostate (neutered) is normal in size, echotexture and echogenicity for a neutered male.

AGE

5/30/20

Left kidney is normal is size (7.15 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.

WEIGHT

78 lbs

Right kidney is normal is size (6.99 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**

Adrenal glands are normal in size, yet subjectively long and skinny/flat. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal. The left adrenal gland measured 3.4 cm long, 0.47 cm at the cranial pole and 0.55 cm at the caudal pole. The right adrenal gland measured 2.85 cm long, 0.66 cm at the cranial pole and 0.59 cm at the caudal pole.

HOSPITAL NAME

Alexander AH

Spleen

Spleen is subjectively large in size with a mildly swollen but smooth capsule. Parenchyma is normal and homogenous in echogenicity and echotexture. No focal nodules or masses are observed. Splenic vasculature appears normal.

REFERRING VET

Dr. Alexander

Liver

Liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

INVOICE

31884

Gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

Gastrointestinal

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is mildly distended with very echogenic reverberation artifact from intraluminal gas. There is no evidence of obstruction, foreign material or infiltrative disease; however, complete visualization of far wall is partially inhibited by gas. Pyloric outflow tract appears patent.

The visible small intestines are normal in wall thickness and layering. 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

The observed pancreas appears appropriately isoechoic to surrounding omental fat. Visible capsule is smooth and normal in contour. Visible pancreatic parenchyma is homogenous and unremarkable. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

Sublumbar and mesenteric lymph nodes are prominent in size with swollen capsular contour. Normal elongated shape (length to width ratio) is maintained. There is no loss of parenchymal detail.

There is no apparent lymphadenopathy noted in these images.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

1. Subjectively flat, yet normal sized adrenal glands. This is most likely a normal patient variant or normal for a young patient. Hypoadrenocorticism cannot be ruled out, yet is considered less likely.
2. **Hypersplenism** – can be associated with congestion caused by sedation (if sedated) but can also be associated with diffuse infiltrative disease. Both benign conditions such as extramedullary hematopoiesis, lymphoid hyperplasia, as well as infiltrative neoplastic diseases such as round cell neoplasia should be considered.
3. **Reactive sublumbar and mesenteric lymph nodes** – lymph nodes are prominent in size with swollen capsular contour. Normal elongated shape (length to width ratio) is maintained. There is no loss of parenchymal detail.

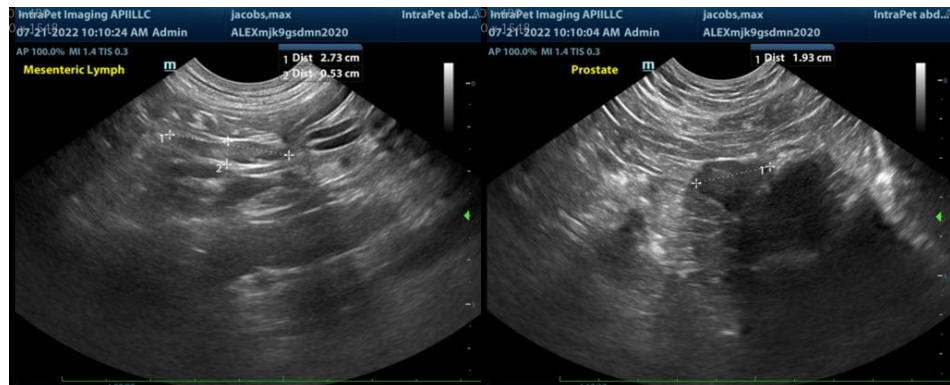
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

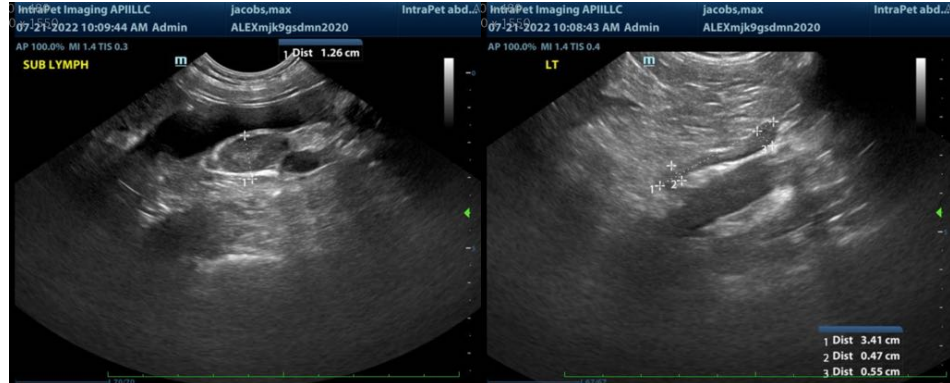
Given the patient's breed and chronic diarrhea a gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended to investigate for and rule out possible exocrine, pancreatic insufficiency.

Given the young age and lymphadenopathy, ruling out concurrent infectious disease is recommended as well with a fecal enteropathogen PCR panel to Texas A&M GI Laboratory could be considered for further evaluation of possible infectious disease.

A baseline cortisol is recommended. If baseline cortisol is less than 2, a full ACTH stimulation test is recommended to rule out hypoadrenocorticism.

In the meantime, while awaiting results other empirical therapies could include empirical deworming with a 5 day course of Panacur as well as fiber supplement to the food as a symptomatic therapy and empirical cobalamin supplementation could be started after a sample has been drawn to send out cobalamin levels. Given the reported pain upon defecation combined with the patient's breed a thorough rectal exam and perianal exam is recommended to rule out concurrent causes of pain such as fistula, etc. is recommended if not recently evaluated.





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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