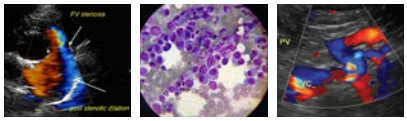
IMAGING PERFORMED BY

IntraPet.com



SonoPath
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DATE

12/1/22

PATIENT

Moses Parker

SPECIES

Canine

BREED

Pit Bull

SEX

Neutered Male

AGE

12/28/11

WEIGHT

53.7 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Stephanie Warga RDCS, RVT

HOSPITAL NAME

Fullerton AH

REFERRING VET

Dr. Levine

INVOICE

43129

PRESENTING CLINICAL SIGNS

P presenting for a follow up ultrasound. Liver enzymes had come back down to normal, but when monitoring for Apoquel use, now marked elevated again. P vomited once on 11/20/2022, but not having other clinical signs.

Current Medications: Ursodiol 250 mg 1.5t SID, Apoquel 16mg 1t SID
probiotic powder
Lab Results: See attached.
Date of Previous IntraPet Ultrasound: 4/28/22. See attached.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with echogenic urine. The Bladder wall is diffusely mildly thickened (0.40 cm), and the mucosa is mildly irregular. The trigone, ureteral papillae, and visible urethra (to a depth of 2cm) appear normal with no evidence of severe mucosal irregularities, masses or cystic calculi. Findings are most consistent with bacterial cystitis or lack of urine distension. Recommend urinalysis and culture.

The prostate is large in size (2.0 cm in height in the sagittal view) and shape for this neutered male dog. The parenchyma is slightly heterogeneous 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 (6.4 cm). Overall echogenicity is slightly hyperechoic with mildly decreased 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 (6.94 cm). Overall echogenicity is slightly hyperechoic with mildly reduced 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 normal in size measuring 0.64 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 in size measuring 0.70 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 mildly heterogenous in echotexture with subtle, indistinct focal mottling. 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 appears somewhat thickened with adherent debris, and an irregular surface, with non-organized intraluminal debris and focal shadowing debris, consistent with small stones. The bile duct is visualized distally and is dilated with isoechoic debris. As it approaches the duodenal papilla, there is a cross sectional view with heterogeneous material and a hyperechoic stone visualized. Additionally, at the level of the duodenal papilla, there is significant shadowing suggestive of a stone. The distal bile duct measures 1.5 cm in diameter.

Gastrointestinal
The stomach contains minimal luminal contents. 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. Duodenum wall measures 0.45 cm. Jejunum wall measures 0.34 cm. 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 prominent and mottled compared to the surrounding isoechoic 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. A prominent mesenteric lymph node is visualized at 0.64 cm. The omentum is of normal echogenicity.

PRIMARY FINDINGS

- Mildly thickened, irregular urinary bladder wall with echogenic urine – Recommend a urinalysis and culture.

- Mildly heterogeneous liver – The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy.

- Large amount of biliary debris adhered to the gallbladder wall with small stones and significant distal bile duct dilation with suspected intraluminal stones and debris and mineralization/a stone at the level of the duodenal papilla – Findings are most consistent with cholecystitis and biliary stone.

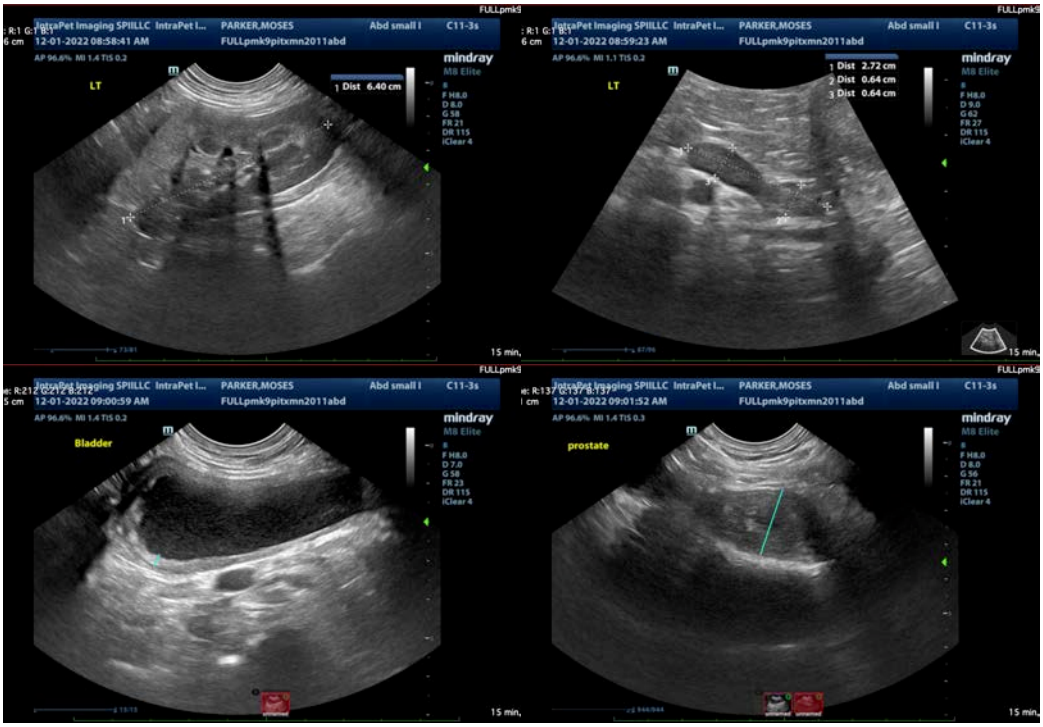
SECONDARY FINDINGS

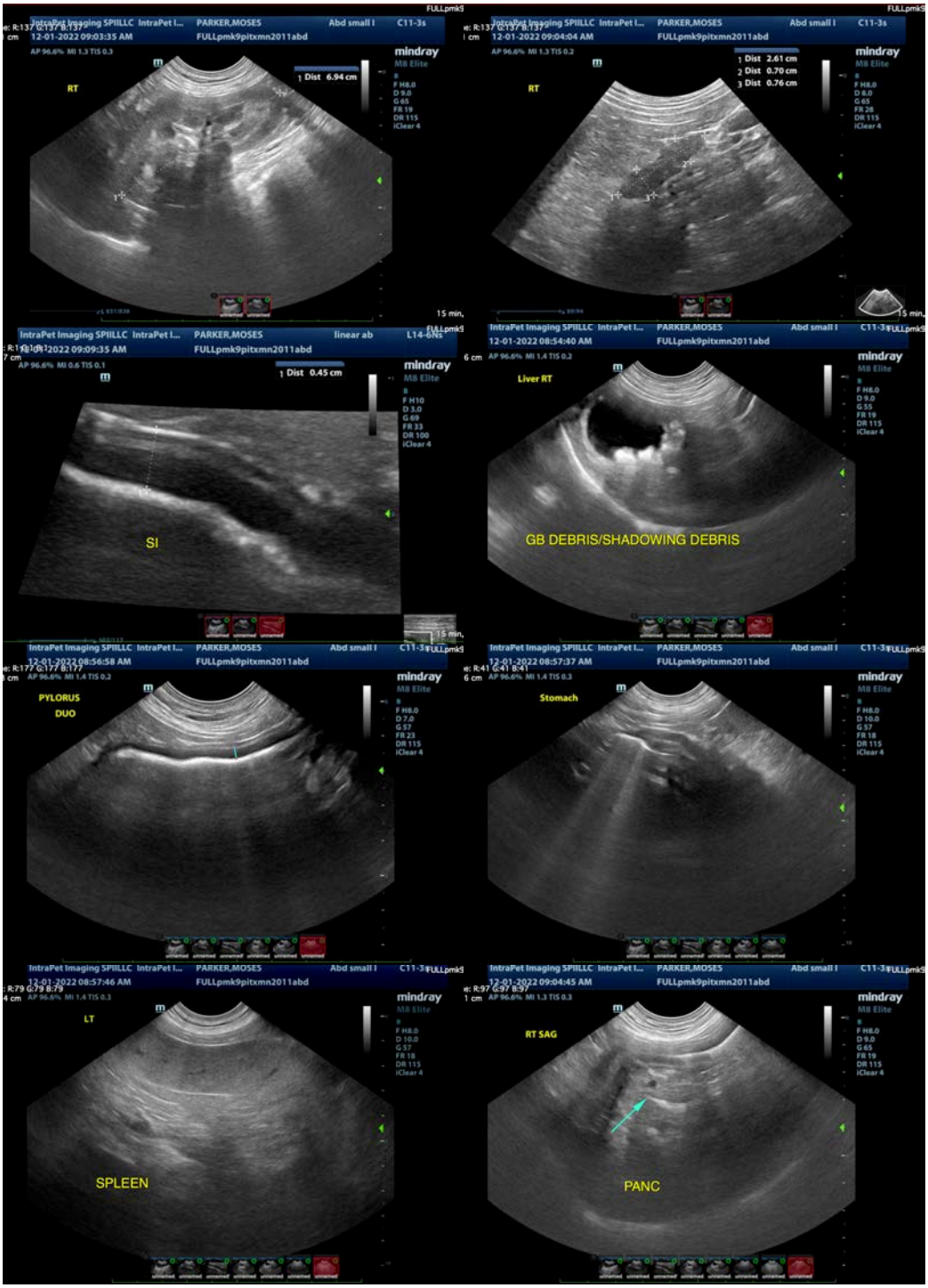
- Borderline large, heterogeneous prostate – The prostate appears much improved from the previous scan, and the large prostatic cyst is not readily apparent.
- Decreased corticomedullary distinction in both kidneys – The bilateral renal findings are consistent with age-related change.
- Prominent, mottled pancreas – The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.

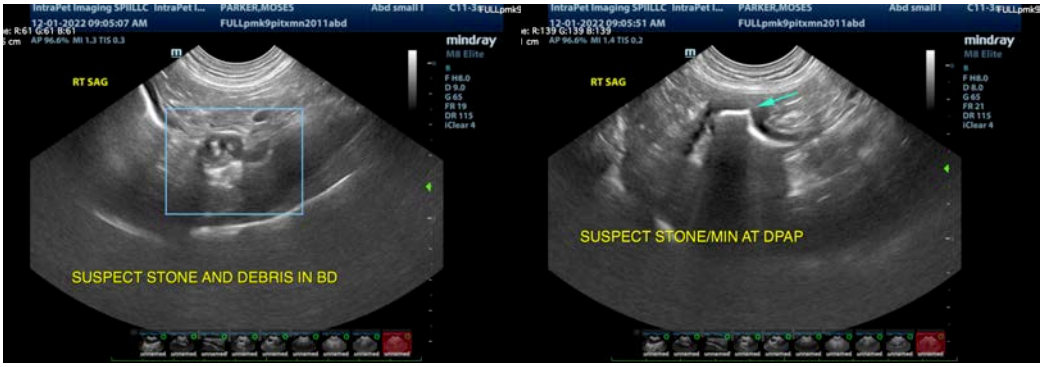
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The gallbladder has a significant amount of debris and stones within the lumen. I suspect it is passing this material and there is inflammation +/- infection and obstruction along the bile duct. There is concern for a possible stone at the level of the duodenal papilla and distal bile duct. Although this is most consistent with stones and inflammation, an underlying mass effect cannot be ruled out definitively. A bilirubin level is recommended. In an ideal situation, centesis of the gallbladder would be performed for cytology and aerobic and anaerobic cultures. If this is not possible, then consider empirical broad-spectrum antibiotic therapy along with continued diligent, lifelong Ursodiol therapy and continued monitoring of the liver enzymes and gallbladder/bile duct. If a complete obstruction is present, then surgical intervention will be necessary. If there is a response to antibiotics, consider repeated evaluation to see if the stones are passing, inflammation passes, etc. If there is a positive response, recommend 6-8 weeks of antibiotics with concurrent probiotic therapy.

Recommend a urinalysis and culture to look for evidence of a UTI based on the appearance of the urinary bladder. I am pleasantly surprised that the prostatic cyst appears markedly improved.




RT
1 Dist 6.94 cm
RT
1 Dist 2.61 cm
2 Dist 0.70 cm
3 Dist 0.76 cm
SI
1 Dist 0.45 cm
Liver RT
GB DEBRIS/SHADOWING DEBRIS
PYLORUS
DUO
Stomach
LT
SPLEEN
RT SAG
PANC



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.

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