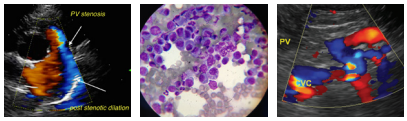
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

DATE

2/2/22

PATIENT

Angel West

SPECIES

Canine

BREED

Miniature Pinscher

SEX

Spayed Female

AGE

1/10/13

WEIGHT

15 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Rachel Brilhart RDMS

HOSPITAL NAME

BPH of Columbia

REFERRING VET

Dr. Scherping

INVOICE

35390

PRESENTING CLINICAL SIGNS

History: History of hepatopathy on bloodwork that waxes and wanes, historically incidental finding. On rads for lameness incidentally noted biliary mineralization and a ovoid mineral focus that is presumably in biliary system but cannot be determined for certain.

Lab Results: Hepatic panel GGT 12, ALT 366, remainder of panel WNL.
Radiographs: Mineralization of biliary tree, ovoid mineral opacity that is more dorsal than expected for gallbladder.
Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Sedation: IV Butorphanol and midazolam.

Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately 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.

The right kidney is normal in size (4.11 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.

The left kidney is normal in size (4.4 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.

Adrenal Glands

The right adrenal gland is normal in size (1.45 cm long x 0.61 cm at the cranial pole and 0.61 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (1.6 cm long x 0.52 cm at the cranial pole and 0.52 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

Spleen

The 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.

Liver

Liver is subjectively enlarged. Margins are smooth but round. It has a normal homogenous echotexture. Parenchyma is diffusely hyperechoic characterized by less prominent than normal portal vein walls and increased echogenicity relative to the spleen. No focal lesions are observed. Visible vasculature appears normal. The intrahepatic biliary tree contains multiple calculi with acoustic shadow.

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

contains mineral with acoustic shadow. The mineral appears to extend into the cystic duct and common bile duct, resulting in common bile duct dilation of 0.6 cm.

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 empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

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

Pancreas is prominent in size and mildly irregular in shape with a diffusely coarse echotexture and heterogenous to hyperechoic echogenicity.

Free Abdomen

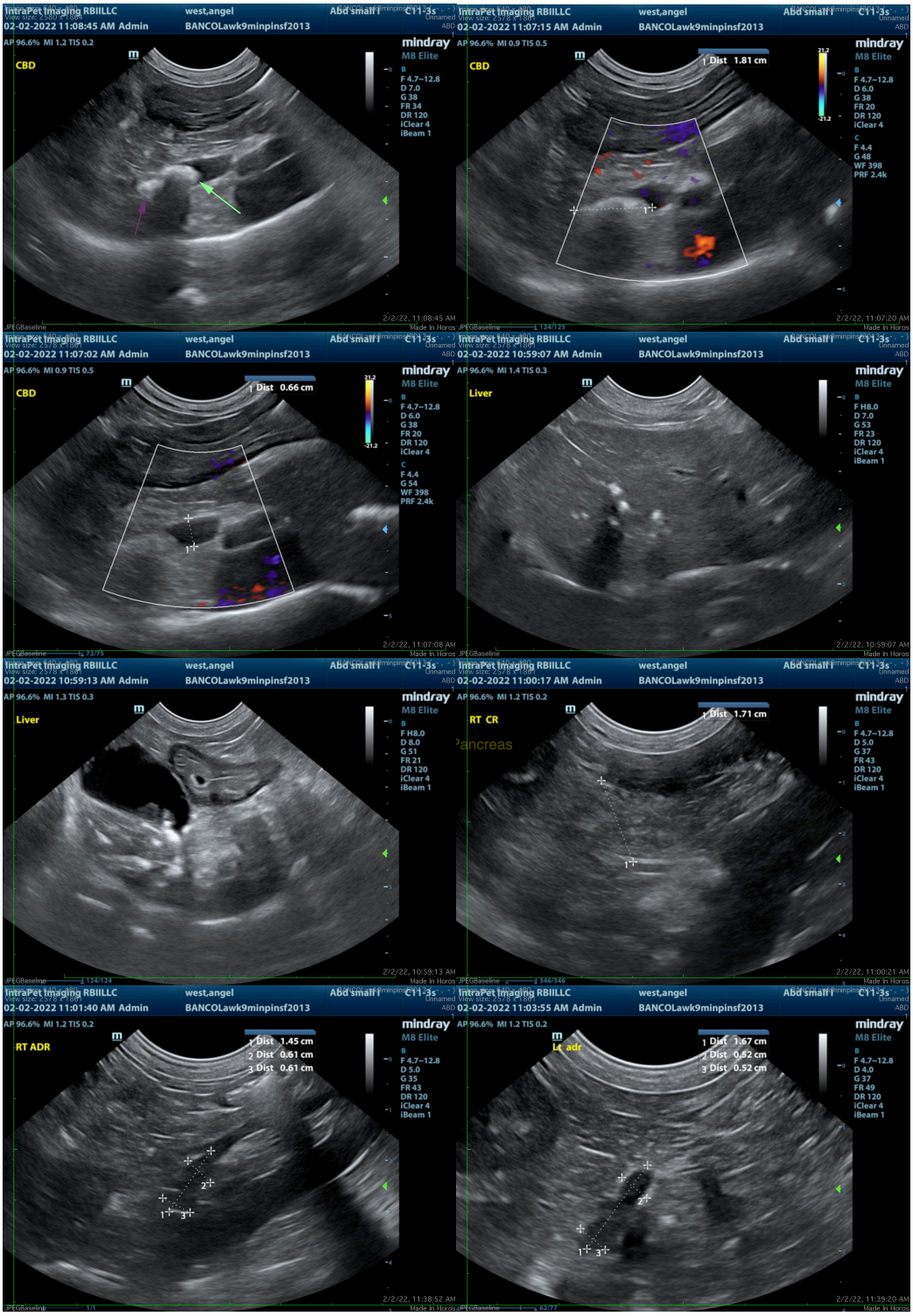
There is no evidence of peritoneal effusion. There is no apparent lymphadenopathy.

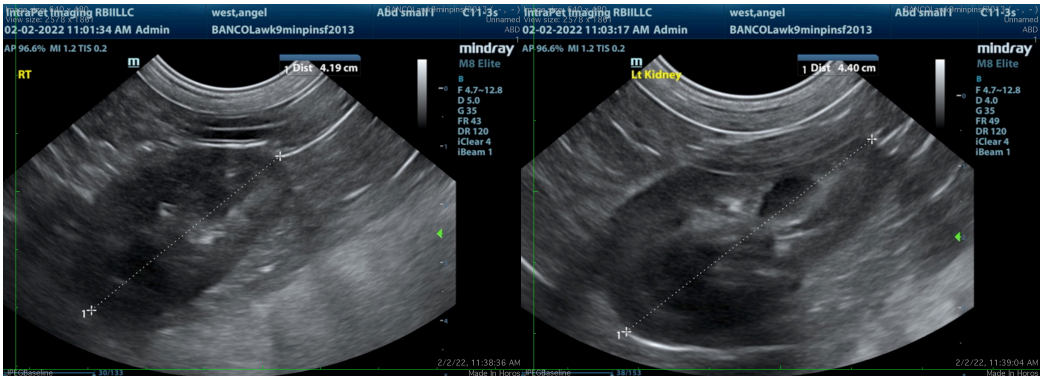
ULTRASONOGRAPHIC FINDINGS

- Prominent heterogenous pancreas – This finding is most consistent with chronic pancreatitis.
- Hyperechoic hepatomegaly canine – most consistent with benign steroid (endocrine) hepatopathy or reactive or idiopathic hepatopathy. Infiltrative neoplasia such as round cell neoplasia is also possible, but considered less likely.
- Intrahepatic biliary mineral
- Gallbladder debris - 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.
- Gallbladder mineral and cystic and common bile duct mineral with duct dilation.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Intrahepatic biliary system mineral as well as mineral gallbladder debris can be an incidental subclinical finding. In an asymptomatic patient, including normal total bilirubin, medical management may not be necessary. However, given the bile duct dilation in this patient, empirical Ursodiol combined with a broad-spectrum antibiotic to address any concurrent bacterial cholangitis, could be considered. If clinical signs develop and/or laboratory changes progress, including an increase in total bilirubin, surgery may be indicated in the future to remove an obstruction. However, given the lack of clinical signs and normal total bilirubin, full obstruction is not believed to be present at this time.


IntraPet Imaging RBIILLC
02-02-2022 11:08:45 AM Admin
west,angel
BANCOLawk9minpinsf2013
Abd small I
C11-3s
mindray
M8 Elite
CBD
IntraPet Imaging RBIILLC
02-02-2022 11:07:15 AM Admin
west,angel
BANCOLawk9minpinsf2013
Abd small I
C11-3s
mindray
M8 Elite
CBD
1 Dist 1.81 cm
IntraPet Imaging RBIILLC
02-02-2022 11:07:02 AM Admin
west,angel
BANCOLawk9minpinsf2013
Abd small I
C11-3s
mindray
M8 Elite
CBD
1 Dist 0.66 cm
IntraPet Imaging RBIILLC
02-02-2022 10:59:07 AM Admin
west,angel
BANCOLawk9minpinsf2013
Abd small I
C11-3s
mindray
M8 Elite
Liver
IntraPet Imaging RBIILLC
02-02-2022 10:59:13 AM Admin
west,angel
BANCOLawk9minpinsf2013
Abd small I
C11-3s
mindray
M8 Elite
Liver
IntraPet Imaging RBIILLC
02-02-2022 11:00:17 AM Admin
west,angel
BANCOLawk9minpinsf2013
Abd small I
C11-3s
mindray
M8 Elite
RT CR
1 Dist 1.71 cm
IntraPet Imaging RBIILLC
02-02-2022 11:01:40 AM Admin
west,angel
BANCOLawk9minpinsf2013
Abd small I
C11-3s
mindray
M8 Elite
RT ADR
1 Dist 1.45 cm
2 Dist 0.61 cm
3 Dist 0.61 cm
IntraPet Imaging RBIILLC
02-02-2022 11:03:55 AM Admin
west,angel
BANCOLawk9minpinsf2013
Abd small I
C11-3s
mindray
M8 Elite
1 Dist 1.67 cm
2 Dist 0.52 cm
3 Dist 0.52 cm



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.

Beth Johnson, DVM, DACVIM
Beth.Johnson@sonopath.com