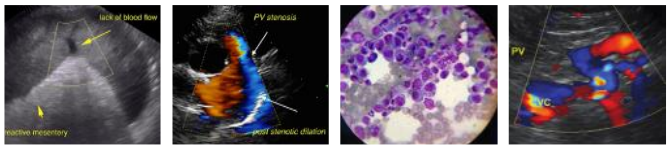
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT

Blu Gaudreau

SPECIES

Canine

BREED

Labrador Retriever

SEX

M

AGE

1yr

WEIGHT

50

INTERPRETED BY

Eric Lindquist, DMV DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Dr Vezzetti

HOSPITAL NAME

Stuga North Veterinary Care

REFERRING VET

Dr Vezzetti

INVOICE

13649ag

DATE

04/28/2023

PRESENTING CLINICAL SIGNS

Young Labrador that was born with a congenital abnormality of his RF limb that had to be amputated as a young puppy; recent UA revealed urate crystals that prompted a bile acids test that resulted in HIGH VALUES. SHUNT HUNT, congenital abnormalities??

Abnormal PE/Chem/CBC/UA Results: Elevated bile acids

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, and pelvic urethra presented normal thicknesses and normal tone. The ureters were not visible which is normal. A minor amount of sand/small calculi and suspended debris was present. The sand/calculi measured ~ 3.0 cm. No uroliths or sediment were visualized, and anechoic urine was present. No evidence of inflammatory or neoplastic changes were noted. Ureteral papillae were normal.

The kidneys were mildly swollen with normal corticomedullary definition and ratio for this age. The cortices presented largely uniform texture with normal echogenic relationship to liver and spleen. Slight pyelectasia was noted. The capsules were acceptably uniform without significant irregularities. The left kidney measured 7.6 cm in length. The right kidney measured cm in length.

The prostate was uniform and mildly enlarged measuring 3.6 cm.

Adrenal Glands

Both adrenal glands were visualized and recognized as having normal shape, size, position and echogenicity for this breed. The phrenic vasculature, glandular echogenicity and detail were unremarkable. Capsule, cortex, and medullary definition were normal for this age patient. The left adrenal gland measured 0.4 cm width. The right adrenal gland measured 0.75 cm caudal pole width by 0.4 cm cranial pole width.

Spleen

The spleen presented a smooth homogeneous parenchyma hyperechoic to liver and renal cortical parenchyma. The capsule was smooth without noticeable expansion or deviation from within the spleen or adjacent pathology. The spleen was folded upon itself cranially. The splenic vasculature demonstrated normal volume without signs of congestion or thrombosis. No sonographic evidence of acute or chronic inflammatory, neoplastic, or infarctual changes were noted.

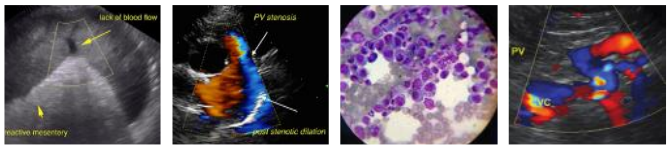
Liver

The liver was mildly subnormal in size. The portal vein at the portal hilus measured 1.2 cm. The portal vein was followed into the liver which presented heterogenous parenchymal changes and subnormal size. The changes were primarily in the right liver. The gastroduodenal vein entering into the portal vein was identified. The prehepatic portal vein appeared to be normal. The portal vein and its branching appeared to have a potential connection between the right or central branch of the portal vein with the vena cava, however this could not be completely confirmed.

Gastrointestinal

Examination of the gastrointestinal tract revealed a stomach and intestine free of stasis, of normal wall thickness, acceptable curvilinear mural detail, and peristaltic activity. Small and large intestine demonstrated normal luminal chyme and stool consistency respectively. No obstructive or overt infiltrative disease was noted. No associated abnormal lymphatic activity was noted.

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



PATIENT

Blu Gaudreau

SPECIES

Canine

BREED

Labrador Retriever

SEX

M

AGE

1yr

WEIGHT

50

INTERPRETED BY

Eric Lindquist, DMV DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Dr Vezzetti

HOSPITAL NAME

Stuga North Veterinary Care

REFERRING VET

Dr Vezzetti

INVOICE

13649ag

DATE

04/28/2023

Pancreas

The base and limbs of the pancreas were observed to be largely isoechoic to surrounding omental fat. Pancreatic duct and capsular contour were acceptably normal, and parenchyma respected normal curvilinear patterns. No overt evidence of active inflammatory or neoplastic disease was noted.

Free Abdomen

No omental masses, overt lymphadenopathy or peritoneal effusion was present.

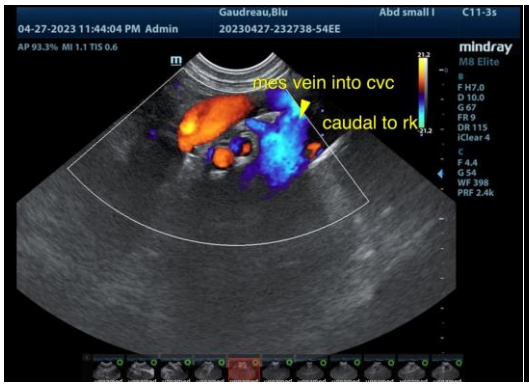
ULTRASONOGRAPHIC FINDINGS

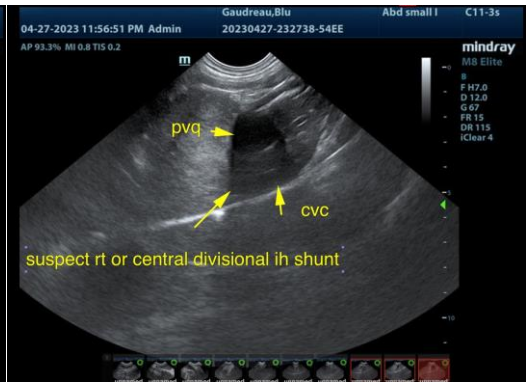
- Potential right divisional or central divisional intrahepatic shunt with diffuse parenchymal hepatic changes.
- Bladder sand.
- Mildly swollen kidneys with slight pyelectasia.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

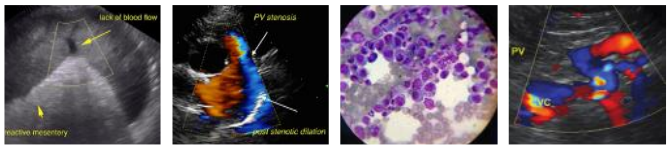
A CT evaluation is warranted for further definition of a potential shunt and liver biopsy. Diffuse parenchymal disease is also present within the liver which may justify elevated bile acids with or without a shunt present. Medical management such as the following should be considered until further evaluation with CT with contrast and liver biopsy.

Royal Canin Hepatic Support diet or Hills L/D, Metronidazole (7.5 mg/kg PO bid) over the next 14 days, Lactulose (Oral: 3.1-3.7 g/5 ml lactulose in a syrup base) long term to target 2-3 soft stools/day, with a high-quality protein supplement of minor amount of yogurt or cheddar cheese. Monitor bile acids, with attention paid to dropping albumin, BUN or cholesterol. SAMe and nutraceuticals as needed. Ursodiol (10-15 mg/kg p.o. q24h) can be considered as hepatoprotectant and to enhance bile flow. Zinc serum level keep between 200—500 ug/dl. If deficient then Tx zinc acetate 1-3 mg/kg/day. Gastrointestinal protectants are recommended if the patient is anorexic.





SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT

Blu Gaudreau

SPECIES

Canine

BREED

Labrador Retriever

SEX

M

AGE

1yr

WEIGHT

50

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Dr Vezzetti

HOSPITAL NAME

Stuga North
Veterinary Care

REFERRING VET

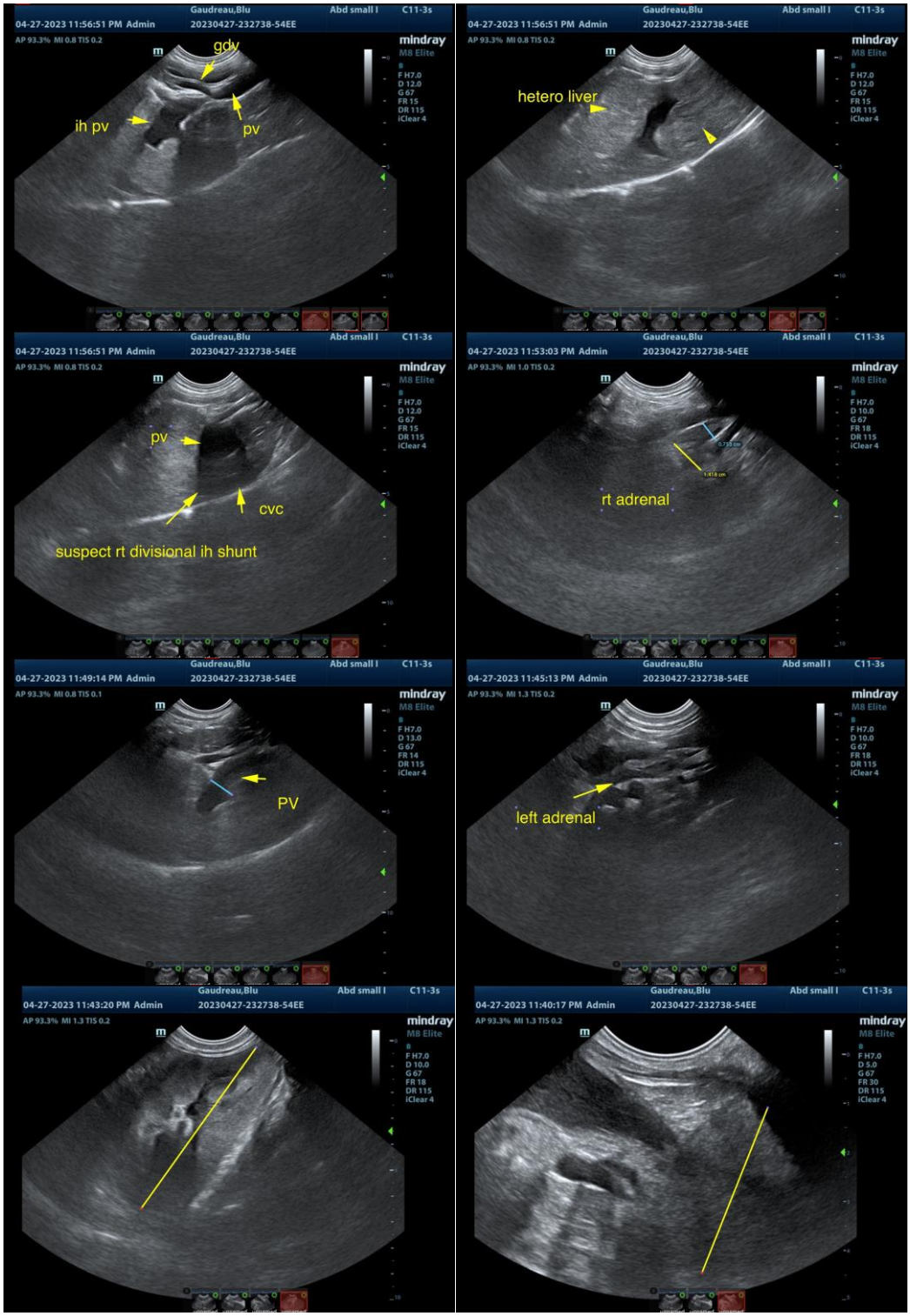
Dr Vezzetti

INVOICE

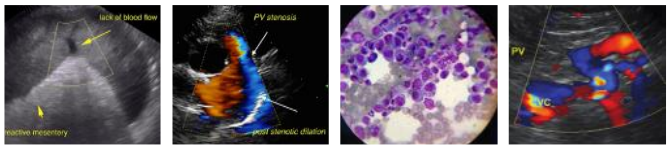
13649ag

DATE

04/28/2023



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT

Blu Gaudreau

SPECIES

Canine

BREED

Labrador Retriever

SEX

M

AGE

1yr

WEIGHT

50

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Dr Vezzetti

HOSPITAL NAME

Stuga North
Veterinary Care

REFERRING VET

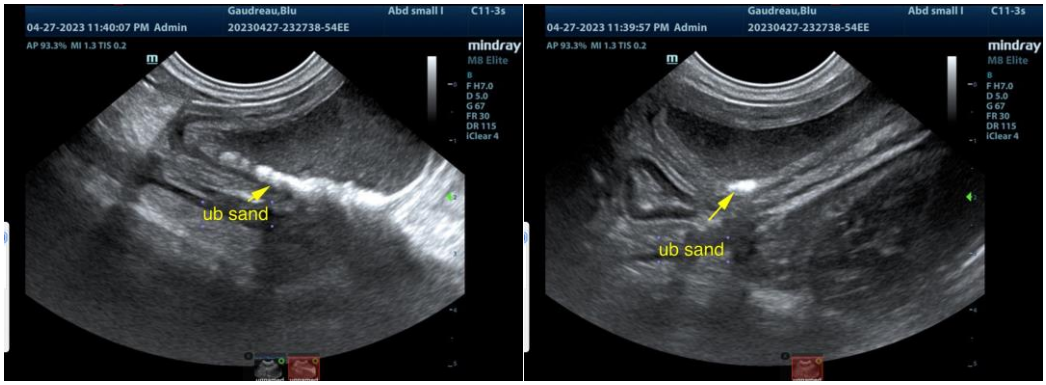
Dr Vezzetti

INVOICE

13649ag

DATE

04/28/2023



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.

Eric Lindquist, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com
Eric.Lindquist@SonoPath.com