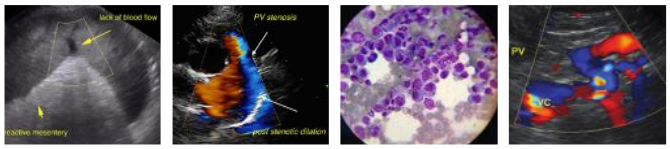
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT

Okie Nader

SPECIES

Canine

BREED

Shih Tzu

SEX

Neutered Male

AGE

14 Years

WEIGHT

5.8 kg

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Matthew Olcha

HOSPITAL NAME

East Meadow VH

REFERRING VET

Matthew Olcha

INVOICE

16584

DATE

7/11/22

PRESENTING CLINICAL SIGNS

History: Hx of elevated liver enzymes and radiographically visible hepatomegaly. Hx of possible myelopathy and dribbling urine. Hx of possible seizures and keppra trial. Ongoing coughing and wheezing; Hx of heart murmur with LAE, no evidence of CHF. Suspect inflammatory airway disease, has been on prednisone.

Abnormal PE/Chem/CBC/UA Results: >ALT, ALP, GGT USG was 1.022 today UA w/ reflex UPC pending See attached

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

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.

The area of the prostate is examined without evident pathology.

Kidneys are overall normal in size and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortices are uniform in texture with some mild increased cortical echogenicity and mild loss of corticomedullary distinction, expected in this age patient. There is no evidence of pyelectasia, mineral or infarcts observed. The kidney measures 3.5 cm. The right kidney measures 4.5 cm. A cortical cyst is present in the caudal pole of the right kidney.

Adrenal Glands

Adrenal glands are small (flattened contour). Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal. The left adrenal gland measures 0.43 cm thick. The right adrenal gland measures 0.44 cm at the cranial pole and 0.45 cm at the caudal pole.

Spleen

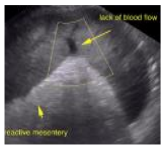
Spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

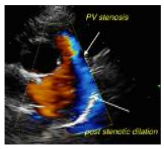
Liver

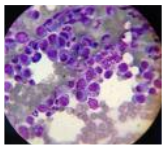
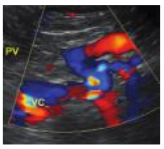
Liver is subjectively enlarged (swollen contour) without disruption of architecture. It has a normal homogenous echotexture. Parenchyma is diffusely hyperechoic characterized by less prominent than normal portal vein walls and increased echogenicity relative to the spleen and falciform fat. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is mildly overdistended with a moderate amount of non-dependent, mildly aggregated/inspissated sludge. Hypo to anechoic cystic areas are noted between the gallbladder sludge and luminal wall. The wall is otherwise smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion.

Gastrointestinal





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

PATIENT

Okie Nader

SPECIES

Canine

BREED

Shih Tzu

SEX

Neutered Male

AGE

14 Years

WEIGHT

5.8 kg

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Matthew Olcha

HOSPITAL NAME

East Meadow VH

REFERRING VET

Matthew Olcha

INVOICE

16584

DATE

7/11/22

The visible stomach wall is normal in thickness 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. Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is mildly distended with echogenic non-shadowing luminal contents and gas consistent with normal ingesta. There is no evidence of obstruction, foreign material or infiltrative disease.

The visible colon is normal in wall thickness 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

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

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Hyperechoic hepatomegaly – This appearance is non-specific and most consistent with a benign steroid (endocrine) or vacuolar hepatopathy or reactive or idiopathic hepatopathy. Inflammatory and/or infiltrative disease (such as round cell neoplasia) are also possible, but considered less likely.

- Emerging mucocele – 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. The non-dependent nature of this sludge combined with the cystic areas are suggestive, however, of possible emerging cystic mucosal hyperplasia or early gallbladder mucocele.

Secondary Findings

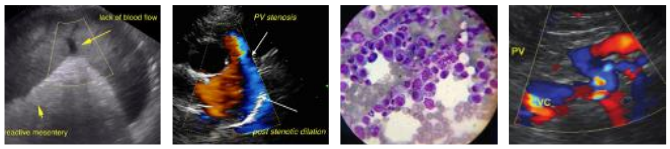
- Age-related kidney changes

- Flat adrenal glands, consistent with this patients reported history of steroid administration.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The hepatobiliary changes present in this ultrasound are nonspecific and could all be secondary to chronic steroid administration, as could the enzyme increase pattern. Chronic steroids could also be contributing to polyuria/polydipsia, which is resulting in the urinary incontinence, as well as occasionally, prednisone can result in weakness, which could be presenting as the peripheral myopathy in this patient. Therefore, without further diagnostics, recommendation include, considering tapering of the oral prednisone if the reported inflammatory airway disease will allow that and/or a transition to inhaled Fluticasone over oral steroids could be considered to help manage the respiratory signs with fewer systemic side effects, ideally. Fluticasone can be cost prohibitive, however.

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT

Okie Nader

SPECIES

Canine

BREED

Shih Tzu

SEX

Neutered Male

AGE

14 Years

WEIGHT

5.8 kg

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Matthew Olcha

HOSPITAL NAME

East Meadow VH

REFERRING VET

Matthew Olcha

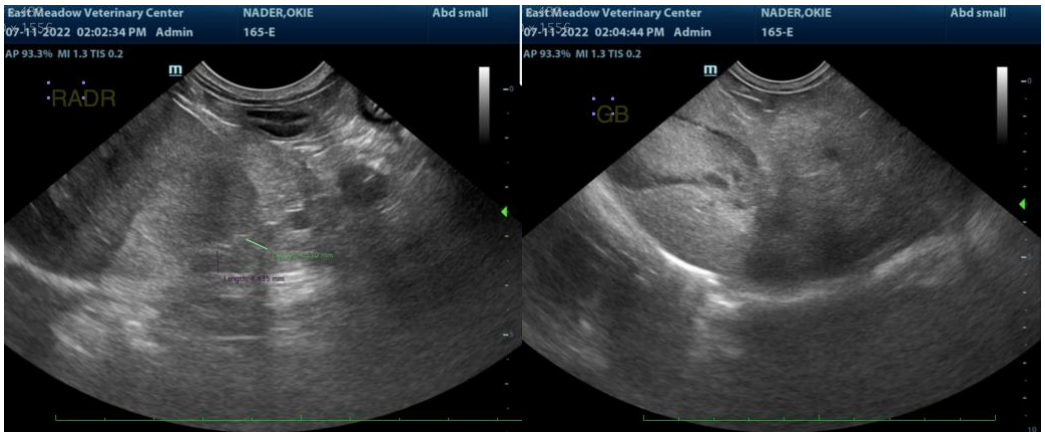
INVOICE

16584

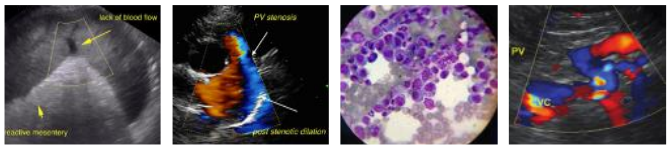
DATE

7/11/22

Given the emerging mucocele, empirical therapy with ursodiol +/- other hepatic nutraceuticals, such as Denamarin and broad-spectrum antibiotics could also be considered with monitoring of liver enzymes for improvement. If improvement is noted, continuation of antibiotics until values normalize and/or plateau is recommended. However, if improvement is not noted, antibiotics can be discontinued but ursodiol should be continued long term.



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT

Okie Nader

SPECIES

Canine

BREED

Shih Tzu

SEX

Neutered Male

AGE

14 Years

WEIGHT

5.8 kg

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Matthew Olcha

HOSPITAL NAME

East Meadow VH

REFERRING VET

Matthew Olcha

INVOICE

16584

DATE

7/11/22

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.

Beth Johnson, DVM DACVIM

Beth.Johnson@SonoPath.com