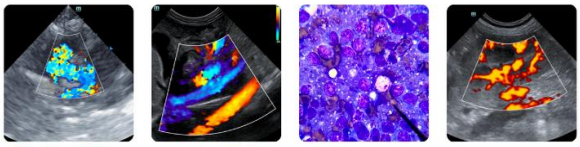


PATIENT

Schmeltzle Othello

SPECIES

Canine

BREED

Shih Tzu Mix

SEX

MN

AGE

2014

WEIGHT

18.3

INTERPRETED BY

R. McKenzie Daniel, DVM, DABVP (Canine and Feline)

IMAGING PERFORMED BY

Rebekah Jakum, CVT ARDMS/RVT

HOSPITAL NAME

Lehigh Valley Animal Hospital

REFERRING VET

Meyer

INVOICE
24013

DATE
02/27/2026

PRESENTING CLINICAL SIGNS

- Elevated liver enzymes, globulins
- Medication: hepatosupport

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra exhibited normal thickness and tone. Anechoic urine was present in the lumen with no evidence of urine/lumen sediment, mineral, or calculi. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes was noted.

Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and mild loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. Bilateral areas of focal medullary mineral were present. The left kidney measured 4.4 cm in length. The right kidney measured 4.4 cm in length.

The area of the aortic trifurcation was free of pathology.

Adrenal Glands

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.53 cm width at the caudal pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.48 cm width at the caudal pole.

Spleen

The spleen exhibited a finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. A small thinly walled splenic cyst was present in the cranial spleen measuring 0.6 cm in diameter. Acute to chronic inflammatory, neoplastic, or benign parenchyma changes were not noted.

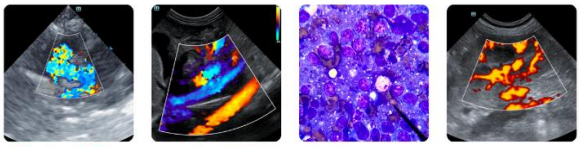
Liver/Gallbladder

The liver presented increased in size. The parenchyma of the liver was subjectively non-homogenous increased in echogenicity compared to the spleen and renal cortices. The echotexture of the liver parenchyma was uniform with a variable coarse echotexture. The capsule of the liver was rounded in margination. The hepatic and portal vasculature were normal in appearance without signs of congestion. No visualized masses or nodules were present. The gallbladder was non-distended in size with moderate congealed non-organized debris. The cystic and common bile ducts were normal.

Gastrointestinal

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with no signs of ileus, obstruction or foreign material.

The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of mechanical/metabolic ileus, obstruction or foreign material.



PATIENT

Schmeltzle Othello

SPECIES

Canine

BREED

Shih Tzu Mix

SEX

MN

AGE

2014

WEIGHT

18.3

INTERPRETED BY

R. McKenzie Daniel, DVM, DABVP (Canine and Feline)

IMAGING PERFORMED BY

Rebekah Jakum, CVT ARDMS/RVT

HOSPITAL NAME

Lehigh Valley Animal Hospital

REFERRING VET

Meyer

INVOICE
24013

DATE
02/27/2026

Normal visible colon wall layers were present with apparent formed feces in lumen.

Pancreas

The parenchyma of the left limb, body and right limb of the pancreas presented isoechoic to the adjacent omental fat. A normal curvilinear capsule contour of the pancreas was present. The visible pancreatic duct was normal. No signs of active inflammation or neoplastic disease was evident.

Free Abdomen

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

ULTRASONOGRAPHIC FINDINGS

Primary

- Chronic hepatopathy pattern exhibiting parenchymal remodeling
- Congealed non-organized gallbladder debris-possible emerging immature mucocele, non-inflamed
- Bilateral chronic renal changes
- Normal adrenal glands
- Small benign splenic cyst

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The appearance of the liver was nonspecific but most consistent with benign hepatopathy. Considerations for the liver may include benign vacuolar hepatopathy, inflammatory/infectious/immune mediated disease, hyperplasia, hematopoiesis, toxic hepatopathy (i.e., copper) or other with neoplasia thought less likely. Ultrasound guided FNA of the liver using a 25-gauge needle and assuming normal coagulation parameters would be warranted for screening cytology. Hepatosupportive medications such as Denamarin or Vitamin E as well as Ursodiol due to its antioxidant and immunomodulatory effects within the liver would be warranted, although these medications may not result in decreased hepatic enzyme levels. Leptospirosis titers / PCR may be considered if clinically indicated. Core or surgical biopsy is likely required for definitive diagnosis.

No overt adrenal pathology as a contributing factor in conjunction with concentrated recent urine and lack of reported clinical signs. Sonographic monitoring of the gallbladder indicated if evidence of progressive cholestasis.

PATIENT

Schmeltzle Othello

SPECIES

Canine

BREED

Shih Tzu Mix

SEX

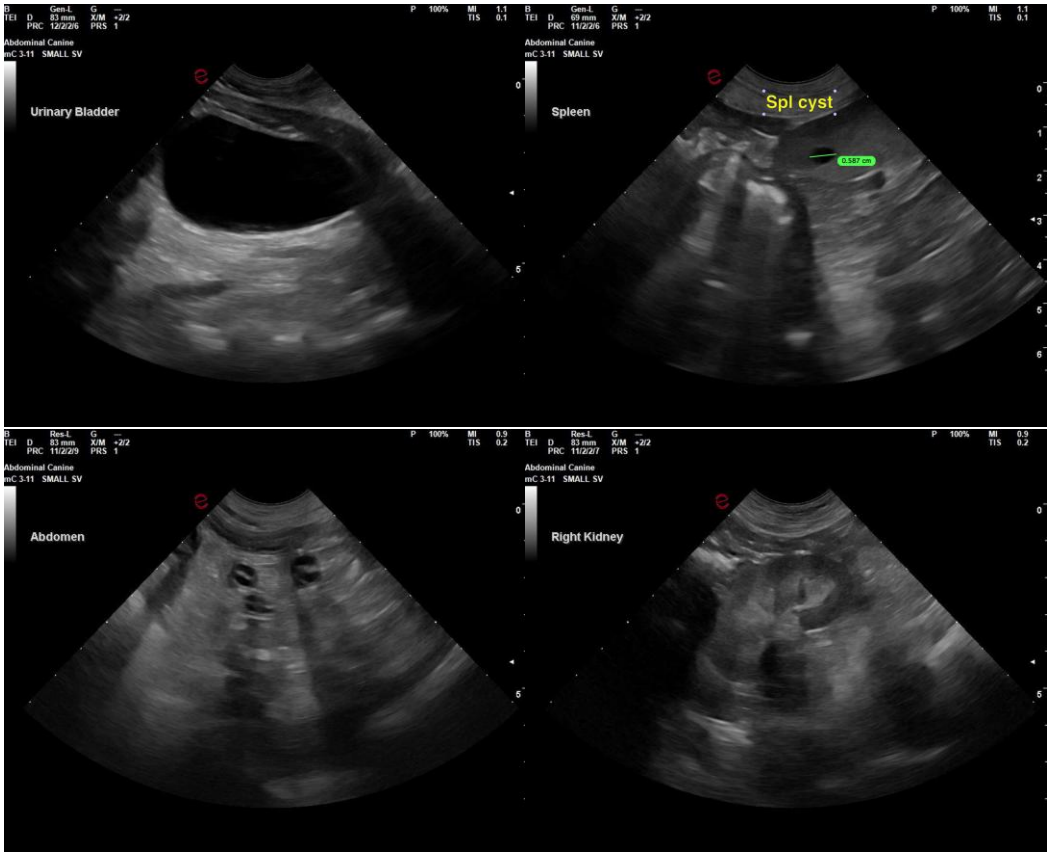
MN

AGE

2014

WEIGHT

18.3



INTERPRETED BY

R. McKenzie Daniel, DVM, DABVP (Canine and Feline)

IMAGING PERFORMED BY

Rebekah Jakum, CVT ARDMS/RVT

HOSPITAL NAME

Lehigh Valley Animal Hospital

REFERRING VET

Meyer

INVOICE
24013

DATE
02/27/2026

PATIENT

Schmeltzle Othello

SPECIES

Canine

BREED

Shih Tzu Mix

SEX

MN

AGE

2014

WEIGHT

18.3

INTERPRETED BY

R. McKenzie Daniel, DVM, DABVP (Canine and Feline)

IMAGING PERFORMED BY

Rebekah Jakum, CVT ARDMS/RVT

HOSPITAL NAME

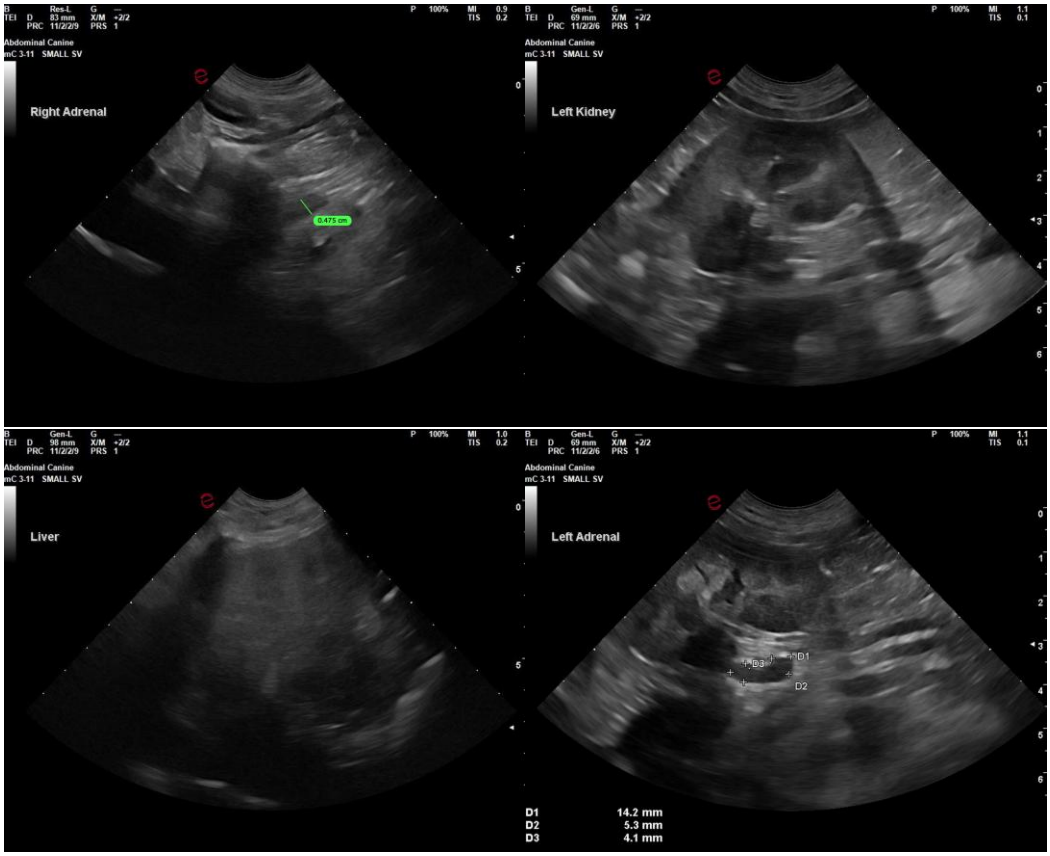
Lehigh Valley Animal Hospital

REFERRING VET

Meyer

INVOICE
24013

DATE
02/27/2026



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.

R. McKenzie Daniel, DVM, DABVP (Canine/Feline Practice)
info@sonopath.com