



PATIENT PRESENTING CLINICAL SIGNS

Oliver Bukovska

History: elevated ALT, was lethargic and eating less for 2 week, no improvement in ALT meds: zentoni, deramaxx, gabapentin
Abnormal PE/Chem/CBC/UA Results: please see attached labs.

SPECIES

Canine

Additional history: ALT 382, Normal AlkFoss. Uria is mildly elevated. Urine Specific Gravity >1.040. Trace proteinuria. T4 normal in January.

BREED

Dachshund

Urinary System

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

SEX

Neutered Male

The prostate is normal in size (0.80 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

AGE

12 years

The left kidney is normal in size (4.74 cm in length) with a normal shape, smooth peripheral margins, and normal internal architecture. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

WEIGHT

6.7 kg

The right kidney is normal in size (4.77 cm in length) with a normal shape, smooth peripheral margins, and normal internal architecture. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

INTERPRETED BY

Andrea Nicastro,
DVM, Diplomate
ACVIM (Small Animal
Internal Medicine)

Adrenal Glands

The left adrenal gland is normal size (0.49 cm at cranial pole) (0.50 cm at caudal pole) (1.77 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

IMAGING PERFORMED BY

Kelly Reschny

The right adrenal gland is normal size (1.41 cm at cranial pole) (0.56 cm at caudal pole) (2.23 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

HOSPITAL NAME

Hartzel AH

Spleen

The spleen is normal in size (1.52 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

REFERRING VET

Dr. Bukovska

Liver

The liver is subjectively prominent in size with slightly swollen peripheral contours. The parenchyma is similar in echogenicity relative to the spleen and exhibits a finely heterogenous pattern. What appears

INVOICE

10251

DATE

2/2/22



PATIENT

Oliver Bukovska

to be the right medial lobe is slightly more hypoechoic compared to the other liver lobes. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

SPECIES

Canine

The gall bladder lumen is moderately distended. The wall is thin and smooth. A moderate amount of aggregated echogenic mostly gravity dependent sludge is observed within the lumen. The cystic and common bile ducts are normal.

BREED

Dachshund

Gastrointestinal

The gastric lumen is mildly distended with fluid and chyme. The gastric wall is normal in thickness with a normal layering pattern. The small intestinal lumen is segmentally dilated with gas and chyme. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. No obstructive or overt infiltrative disease is noted.

SEX

Neutered Male

Pancreas

The region of the pancreas is isoechoic relative to surrounding omental fat. No obvious parenchymal abnormalities are observed. There is no evidence of regional inflammation or effusion.

AGE

12 years

Free Abdomen

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

WEIGHT

6.7 kg

ULTRASONOGRAPHIC FINDINGS

INTERPRETED BY

Primary Findings

- Non-specific diffuse hepatopathy. Differentials include inflammatory disease (i.e., chronic active hepatitis, bacterial cholangiohepatitis), Leptospirosis, hepatotoxicosis (i.e., copper), reactive hepatopathy +/- concurrent age-related change. The significance of the slightly more hypoechoic right medial lobe is unclear. This may be a normal variant for this patient. However, inflammatory disease, emerging neoplasia or other hepatic issue cannot be complete excluded.
- Gall bladder sludge, non-mucocele

Secondary Findings

- Bilateral age-related renal changes with dystrophic mineralization

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Consider an antibiotic trial, as empirical treatment for bacterial cholangiohepatitis, if a conservative approach is desired. However, if the ALT does not improve within 5-7 days of initiating therapy, antibiotics should be discontinued, and further workup explored.
- If a more aggressive approach is desired, hepatic tissue sampling (i.e., fine-needle aspirate or biopsy) is recommended. Surgical biopsies with aerobic and anaerobic bile cultures and

Andrea Nicastro,
DVM, Diplomate
ACVIM (Small Animal
Internal Medicine)

IMAGING PERFORMED BY

Kelly Reschny

HOSPITAL NAME

Hartzel AH

REFERRING VET

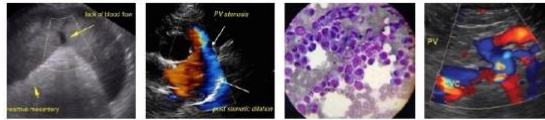
Dr. Bukovska

INVOICE

10251

DATE

2/2/22



PATIENT

Oliver Bukovska

acquisition of additional hepatic tissue samples for possible copper quantitation would be ideal. Regardless of sampling method, clotting times should be assessed prior to the procedure.

SPECIES

Canine

- Also consider leptospirosis testing (i.e., blood-in urine PCR, serology).
- Given the patient's age, three-view thoracic radiographs are recommended.

BREED

Dachshund

SEX

Neutered Male

AGE

12 years

WEIGHT

6.7 kg

INTERPRETED BY

Andrea Nicaastro,
DVM, Diplomate
ACVIM (Small Animal
Internal Medicine)

IMAGING PERFORMED BY

Kelly Reschny

HOSPITAL NAME

Hartzel AH

REFERRING VET

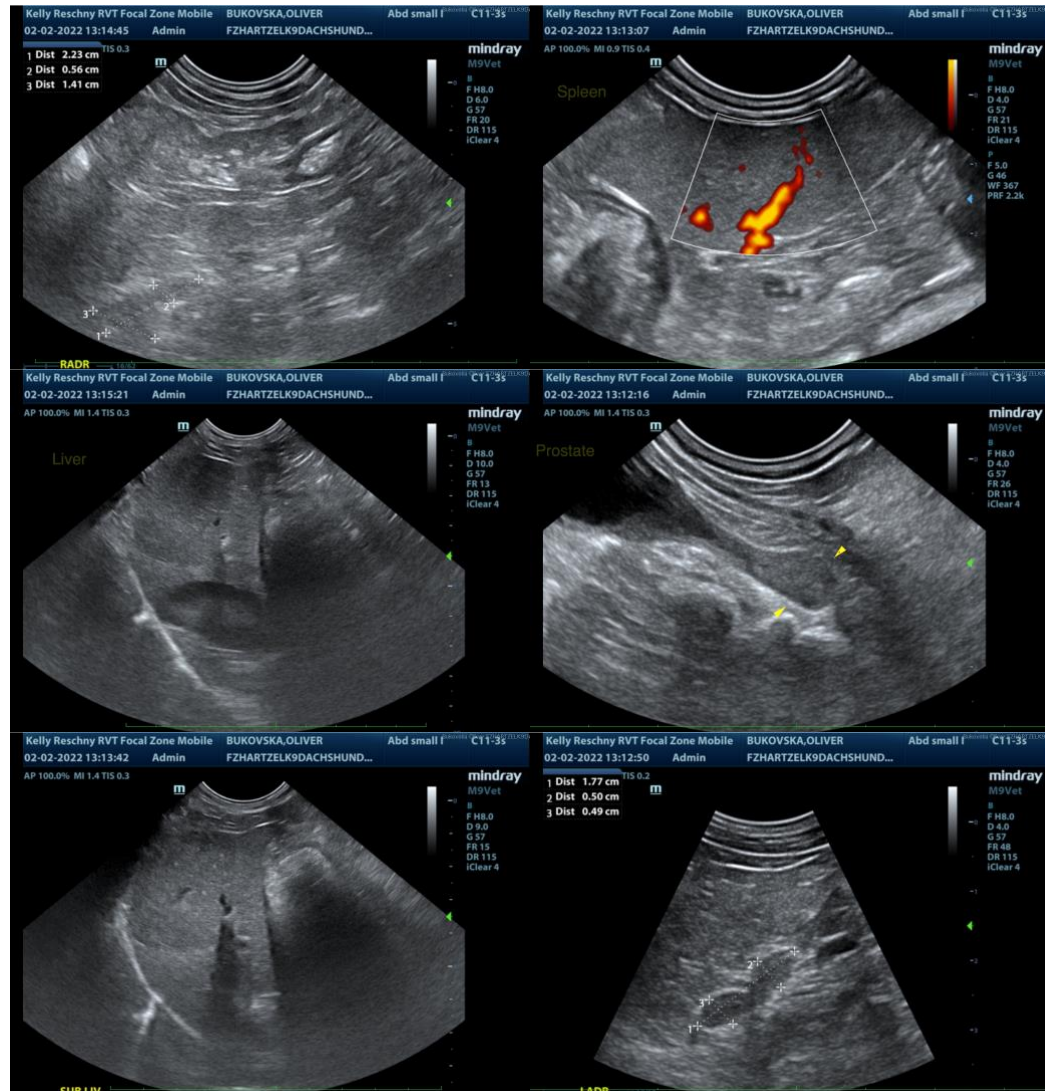
Dr. Bukovska

INVOICE

10251

DATE

2/2/22





PATIENT

Oliver Bukovska

SPECIES

Canine

BREED

Dachshund

SEX

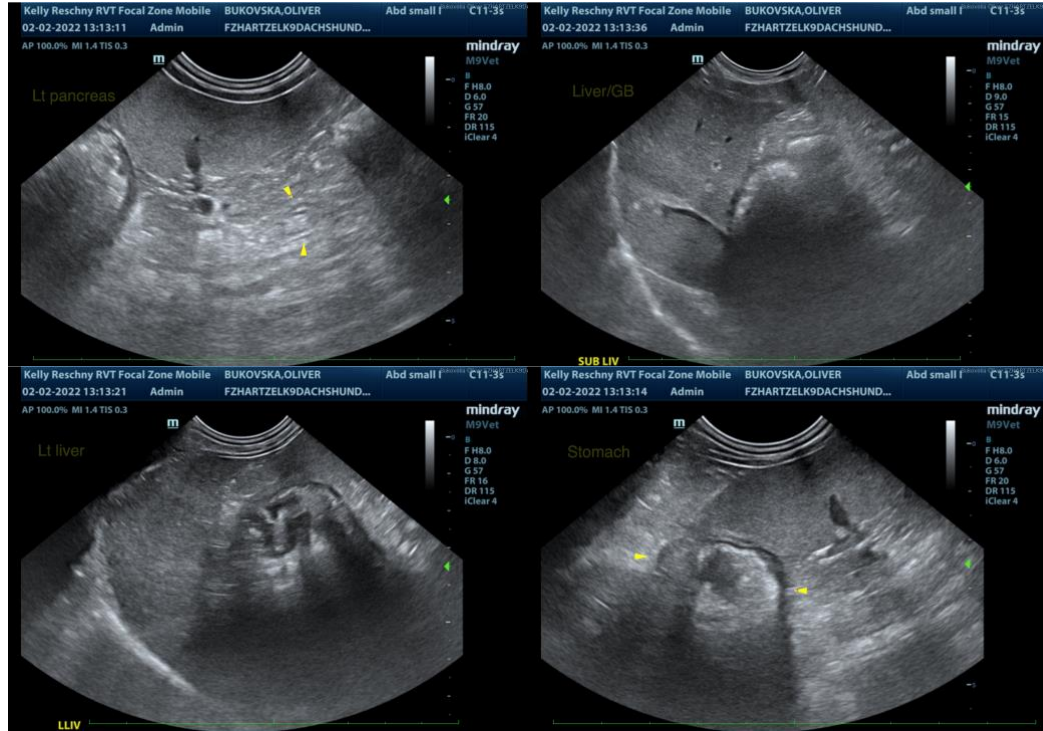
Neutered Male

AGE

12 years

WEIGHT

6.7 kg



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.

INTERPRETED BY

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.

Andrea Nicastro, DVM, Diplomate DACVIM (Small Animal Internal Medicine)
info@SonoPath.com

IMAGING PERFORMED BY

Kelly Reschny

HOSPITAL NAME

Hartzel AH

REFERRING VET

Dr. Bukovska

INVOICE

10251

DATE

2/2/22