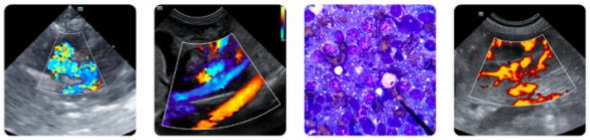

PATIENT

Turbo Oura

SPECIES

Canine

BREED

Pug

SEX

Neutered Male

AGE

7 Years 2 Months

WEIGHT

37 Pounds

INTERPRETED BY

Alicia Angosto Guerrero, DMV, PgDip, MSc.

IMAGING PERFORMED BY

Cameron Johnson, DVM

HOSPITAL NAME

Craig Road AH

REFERRING VET

Cameron Johnson, DVM

INVOICE

35914

DATE

2/20/26

PRESENTING CLINICAL SIGNS

Mildly elevated liver enzymes and hyperglobulinemia of unknown origin

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The bladder lumen is normally distended, and the wall of the urinary bladder appears thin and smooth. The urine is anechoic. Normal appearance of the bladder neck and proximal urethra. There are no calculi and no sonographic evidence of inflammatory or neoplastic changes.

Left Kidney
The left kidney is normal in shape and size, measuring 4.24 x 2.25 cm, with cortical thickness measuring 0.40 cm in the sagittal plane.

Right Kidney
The right kidney is normal in shape and size, measuring 4.02 x 2.24 cm, with cortical thickness measuring 0.47 cm in the sagittal plane.

Both Kidneys
The renal cortices are isoechoic compared to the liver parenchyma. The corticomedullary ratio is normal and corticomedullary definition is preserved. Mild hyperechogenicity of the outer medulla is noted. There is no evidence of pyelectasia, nephrolithiasis, or hydronephrosis.

Adrenal Glands

Despite careful evaluation of the expected adrenal regions, the adrenal glands could not be identified on the submitted study.

Spleen

Splenic thickness is 0.97 cm. The parenchyma demonstrates normal echogenicity and fine homogeneous echotexture without focal abnormalities. The splenic capsule is smooth and regular.

Liver

The liver is subjectively normal in size, with sharp edges and a regular contour. The hepatic parenchyma is uniform and isoechoic compared to the falciform fat, with a normal echotexture. No hepatic lymphadenopathy is observed.

The gallbladder lumen is moderately distended. The wall is thin and the contents are primarily anechoic with a moderate amount of biliary sludge. No dilation of the cystic duct or common bile duct is observed.

Gastrointestinal

The stomach is empty and folded with a mild gas pattern, mural thickness measuring 2.10 mm and preserved wall layering. The pylorus was not clearly measured. The duodenum measures 2.35 mm, the jejunum 1.99 mm, and the ileum 1.73 mm, all with preserved wall layering. No signs of inflammation, ileus, or foreign material are identified. The colon measures 0.87 mm with minimal fecal material in the lumen.

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Pancreas

The evaluated pancreatic regions do not show ultrasonographic evidence of overt inflammation.

Free Abdomen

No sonographic evidence of abdominal effusion, peritonitis, or lymphadenomegaly is identified. The iliac trifurcation appears normal.

PRIMARY FINDINGS

- Moderate biliary sludge (without obstruction)
- Mild bilateral outer medullary hyperechogenicity

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No structural hepatobiliary abnormalities are identified to explain the mildly elevated liver enzymes and hyperglobulinemia. The hepatic parenchyma is homogeneous, without nodularity, architectural distortion, mass lesions, or biliary obstruction.

Moderate biliary sludge is present and likely reflects biliary stasis rather than primary hepatobiliary disease, particularly in the absence of ductal dilation or mural thickening.

Mild outer medullary hyperechogenicity is noted in both kidneys, a nonspecific finding that may be incidental or related to early metabolic or degenerative change, but without structural evidence of renal disease.

Overall, the study does not demonstrate imaging findings consistent with chronic hepatitis, infiltrative hepatic disease, or abdominal neoplasia. In the context of hyperglobulinemia, a systemic inflammatory or immune-mediated process should be considered. The hepatic enzyme elevation may be reactive or secondary rather than indicative of primary structural hepatic disease.

Recommendations

- Serum protein electrophoresis to characterize hyperglobulinemia (polyclonal vs monoclonal).
- Consider infectious and inflammatory disease screening based on geographic risk and clinical suspicion.
- Repeat biochemical monitoring to assess progression or resolution of enzyme elevation.

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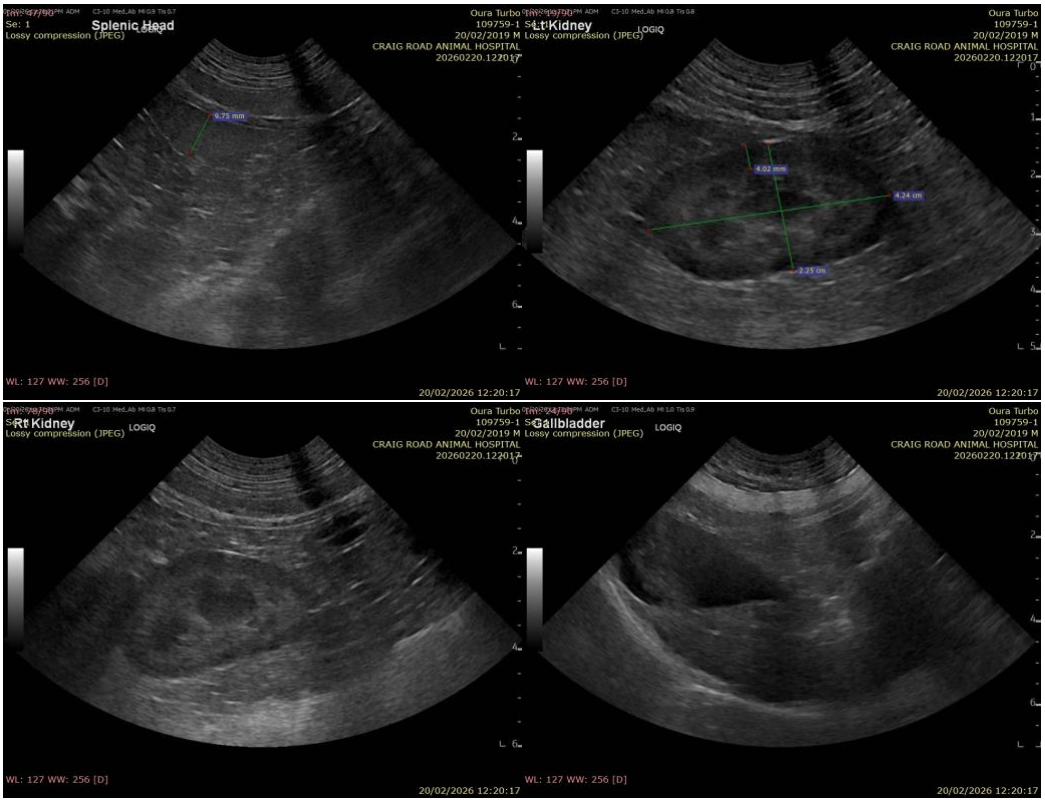

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Alicia Angosto Guerrero, DMV, PgDip, MSc.

info@SonoPath.com