

**PATIENT PRESENTING CLINICAL SIGNS**

Shilo MacFarlane

History: Sept 2022 - moderate exercise intolerance with upper resp sounding rasp, some mild panting at home without reason. PE unremarkable - Oct 2022 - rads and BW performed. ALT, ALP, CHOL elevated, rest was NAF. RADS: nothing obvious. - will email meds: aventi liver, Metacam

**SPECIES**

Canine

Abnormal PE/Chem/CBC/UA Results: please see attached rads and labs  
CBC unremarkable. Chemistry shows ALP of 1670. ALT 170. (In March 2022, ALP was 845; ALT 94).

**BREED**

Newfie X

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The **urinary bladder** wall is 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**

Spayed Female

The **left kidney** is normal size (6.64 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

**AGE**

11 years

The **right kidney** is normal size (7.20 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

**WEIGHT**

42 kg

**Adrenal Glands**

The **left adrenal gland** is normal size (0.67 cm at cranial pole) (0.89 cm at caudal pole) (2.58 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.

**INTERPRETED BY**

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

The **right adrenal gland** is normal size (1.61 cm at cranial pole) (0.68 cm at caudal pole) (2.34 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

**Spleen**

The **spleen** is normal in size (2.68 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.

**HOSPITAL NAME**

Buck AH

**Liver**

The **liver** is subjectively normal in size with normal contours and structure. There is appropriate echogenicity and echotexture. No overt structural evidence of inflammatory, infiltrative, or regenerative pathology is evident. Vascular and biliary tracts are of normal volume with no evidence of congestion. No pathological hepatic lymphadenopathy observed.

**REFERRING VET**

Dr. MacFarlane

The **gall bladder** lumen is moderately distended. The wall is thin and smooth. Luminal contents are mostly anechoic. The cystic and common bile ducts are normal/not seen.

**INVOICE**

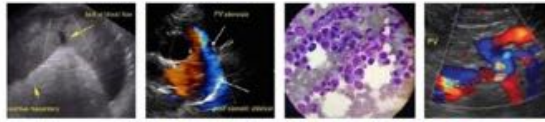
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**Gastrointestinal**

The **gastric lumen** is not distended. The gastric wall is normal in thickness with a normal layering pattern. The small intestinal lumen is segmentally gas-distended (mild). The small intestinal wall

**DATE**

10.13.22



**PATIENT**

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thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. There is no evidence of an obstructive pattern.

**SPECIES**

Canine

**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.

**BREED**

Newfie X

**Free Abdomen**

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

**ULTRASONOGRAPHIC FINDINGS**

**Primary Findings**

**SEX**

Spayed Female

- An obvious cause for the patient's elevated liver values is not identified in this study. Given the liver enzyme pattern, a benign process (i.e., vacuolar hepatopathy, age-related remodeling and/or mild regenerative nodular hyperplasia) is suspected. However, an emerging, more insidious hepatopathy cannot be completely excluded.

**AGE**

11 years

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Consider pre-and postprandial serum bile acids to assess hepatic function. If normal or not significantly elevated, consider a recheck of liver values in 3 months to assess for progression. If values are continuing to increase, a repeat ultrasound +/- hepatic tissue sampling may be warranted. If urine bile acids are substantially elevated, hepatic tissue sampling may be warranted at this time.

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**HOSPITAL NAME**

Buck AH



**REFERRING VET**

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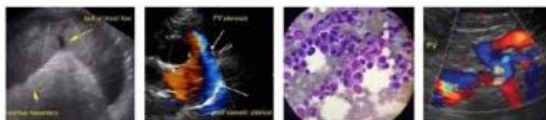
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.



**PATIENT**

Shilo MacFarlane

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.

**SPECIES**

Canine

**Andrea Nicastro**, MPH, DVM, Diplomate DACVIM (Small Animal Internal Medicine)  
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**BREED**

Newfie X

**SEX**

Spayed Female

**AGE**

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