



PATIENT PRESENTING CLINICAL SIGNS

Charlie DeSova
History: elevation in ALT, increase in a prior elevation on ALP
Abnormal PE/Chem/CBC/UA Results: ALKP 1728, ALT 314

SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Canine **Urinary System**

BREED

Bichon Frise

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

AGE

13 years

The left kidney is normal size (5.68 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. Mild pyelectasia is present (0.24 cm in the transverse plane). There is no evidence of nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

WEIGHT

18.4 lbs

The right kidney is normal in size (5.60 cm in length) with a normal shape, smooth peripheral margins, and normal internal architecture. There is mild to moderate loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. Pinpoint hyperechoic foci are observed within the cortex. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

Adrenal Glands

INTERPRETED BY

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

The left adrenal gland is mildly enlarged (0.73 cm at cranial pole) (0.61 cm at caudal pole) (2.41 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

Jessica Miller

The right adrenal gland is mildly enlarged (1.18 cm at cranial pole) (0.66 cm at caudal pole) (2.53 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

Summit Dog&Cat
Hospital

Spleen

The spleen is subjectively normal in size (1.12 cm in width at the level of the hilus) with a slightly irregular contour at the cranio-lateral aspect. Overall, the parenchyma is of appropriate echogenicity and echotexture. A 0.94 x 0.69 cm heterogeneous nodule is observed at the cranio-lateral aspect. The lesion causes mild capsular expansion. In addition, a few, small, ill-defined hyperechoic areas are observed throughout the organ. Splenic vasculature appears normal with no evidence of thrombosis.

REFERRING VET

Dr. Vogler

Liver

INVOICE

11085

The liver is subjectively prominent in size with swollen curvilinear peripheral contours. The parenchyma is isoechoic relative to the spleen and exhibits mild heterogeneity. No distinct focal lesions are observed. Hepatic vasculature and biliary tracts are of normal volume with no evidence of congestion.

DATE

6.15.22

The gall bladder lumen is moderately distended. The wall is thin and smooth. A scant amount of echogenic debris is adhered to the luminal surface. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The gastric lumen is mildly distended with ingesta. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract appears patent. One segment of bowel in the midabdominal region is moderately to severely fluid-distended (1.80 cm in diameter) and hypomotile. Echogenic material is floating within the fluid. This segment is thought to represent a portion of colon. However, small intestine cannot be excluded. In the remainder of the bowel, the lumen is not dilated. The wall is normal in thickness with a normal layering pattern and appropriate mural detail. The wall of the descending colon is normal in thickness and contains granular-appearing fecal material.

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.

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

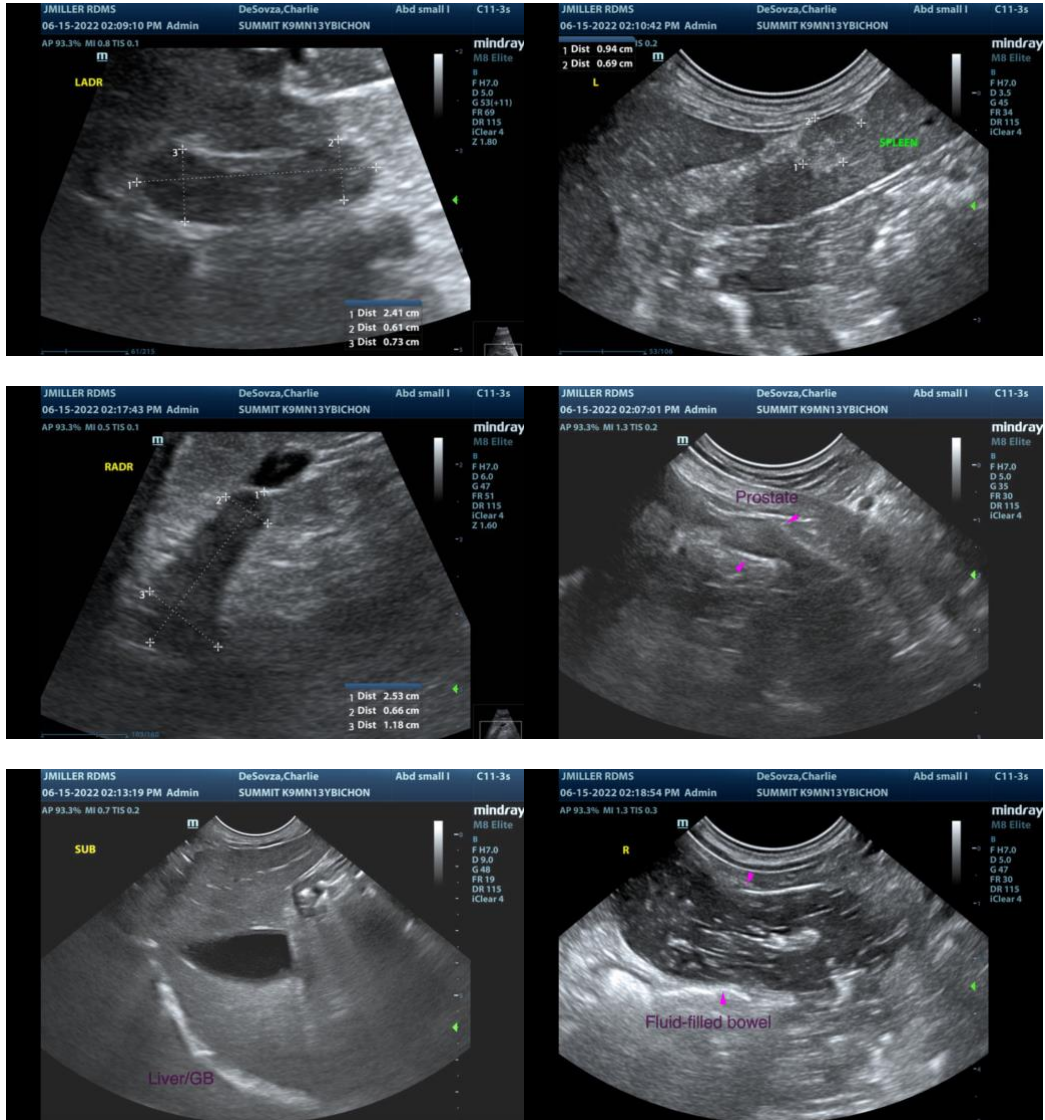
- The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, regenerative nodular hyperplasia, and/or age-related remodeling. Inflammatory disease is considered less likely given the disproportionate elevation in ALP. Infiltrative neoplasia is possible but considered less likely based on the sonographic appearance of the liver.
- The splenic nodule at the cranial aspect may represent an emerging tumor or a benign lesion (i.e., myelolipoma, focus of lymphoid hyperplasia, or extramedullary hematopoiesis). The other hyperechoic nodules trend toward the benign (i.e., myelolipomas).

Secondary Findings

- Minor, age-related renal changes with right dystrophic mineralization

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Serial monitoring (i.e., every 3-4 months) of the patient's liver values is recommended. If liver values continue to increase, a repeat abdominal ultrasound +/- hepatic tissue sampling may be warranted.
- If clinical signs of Cushing's disease develop, further testing (i.e., low dose dexamethasone suppression test) should be considered.
- The dilated bowel loop is thought to represent colon. However, if gastrointestinal signs (i.e., vomiting, inappetence) are present, a repeat ultrasound +/- abdominal radiographs should be considered in the next 12-24 hours to reassess this bowel loop.



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.

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