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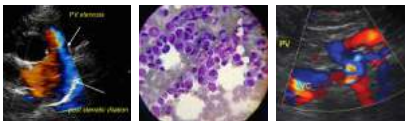

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DATE

8/31/21

PATIENT

Kaimera Brashears

SPECIES

Canine

BREED

Boxer

SEX

Female Spayed

AGE

6/19/10

WEIGHT

49 lbs.

INTERPRETED BY

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

HOSPITAL NAME

Banfield Pet Hospital of Towson

REFERRING VET

Dr. Lewis and Dr. Culbertson

INVOICE

11736kk

PRESENTING CLINICAL SIGNS

History: Anorexia and climbing liver values. Patient was seen in spring and elevated renal values noted. P was started on renal food and Rimadyl for arthritis concern. Recheck renal values in a month showed a return to normal limits, but new mild/moderately elevated liver values. Rimadyl was discontinued and patient returned in another month for hepatic panel. ALT nearly 3000 and Alk Phos >2000.

Current Medications: Sotalol 120mg 1/4 tab q 12 hours, Fluoxetine 30mg q am.

Lab Results: ALT nearly 3000 and Alk Phos >2000

Radiographs: Not provided by the veterinarian.

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Sedation: Sedation not required for scan.

Stat Report: STAT report not requested by the veterinarian.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is distended with mostly 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.

The left kidney is small in size (3.62 cm in length) with an irregular shape. The cortex is variably thickened and irregular. There is moderate loss of corticomedullary distinction. A 1.87 x 1.69 cm isoechoic nodule is observed at the lateral aspect. Moderate pyelectasia is present (1.00 cm in the longitudinal plane). Echogenic debris is observed within the renal pelvis. Hyperechoic, shadowing foci are visualized. There is no evidence of hydroureter. Renal vasculature is normal.

The right kidney is normal in size (5.43 cm in length) with a slightly irregular shape. The cortex is variably thickened and there is mild to moderate loss of corticomedullary distinction. Several nephroliths are present. The largest measures 1.51 cm in length. Trace pyelectasia is present. There is no evidence of hydroureter.

Adrenal Glands

The left adrenal gland is mildly enlarged (0.76 cm at cranial pole) (0.90 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.

The right adrenal gland is normal size (0.55 cm at cranial pole) (0.54 cm at caudal pole) (2.70 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.

Spleen

The spleen is normal in size (1.51 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.

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. The gall bladder lumen is moderately distended. The wall is thin and smooth. A moderate amount of aggregated, echogenic, adherent sludge is observed within the lumen. The cystic and common bile ducts are normal/not seen.

Gastrointestinal
The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is not distended. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is not dilated. 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 disease is noted.

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:

- An obvious cause for the elevated liver enzymes is not identified in the study. However, a microscopic hepatopathy (i.e., bacterial cholangiohepatitis, Leptospirosis, chronic active hepatitis, copper-associated hepatotoxicity, infiltrative neoplasia (less likely)) cannot be excluded.

- Gall bladder sludge – incidental, non-mucocele.

Secondary Findings:

- Mild left adrenomegaly.

- Bilateral, age-related renal changes with non-obstructive nephroliths in the right kidney and dystrophic mineralization in the left kidney. The nodule in the left renal cortex trends towards the benign (i.e., hyperplastic nodule) with a possibility of emerging neoplasia.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

1. Cytologic evaluation of the liver should be considered in this patient if clotting status is appropriate. A fine needle aspirate using a 25-gauge needle is recommended. If results ar inconclusive, consider a surgical liver biopsy with aerobic and anaerobic bile cultures and acquisition of additional hepatic tissue samples for copper quantitation.

2. A more conservative approach would be to consider empirical treatment for bacterial cholangiohepatitis (amoxicillin-clavulanic acid, Denamarin Advanced). If no improvement in the liver values is seen within 7-10 days of initiating therapy, antibiotics should be discontinued, and hepatic

tissue sampling reconsidered. If liver values improve, continue therapy for at least 4-6 weeks and 1 week beyond normalization of the liver values.

3. Leptospirosis testing can be considered. However, given the chronicity of the liver enzyme elevations, this differential is considered less likely.

4. Three-view thoracic radiographs should be performed prior to any anesthetic event.

The information and recommendations provided are based on the images presented by the referring veterinarian. 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.

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