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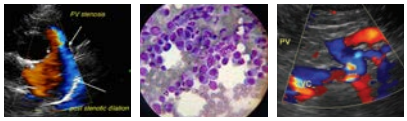
IntraPet.com



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DATE

9/7/21

PATIENT

Tesla Hallum

SPECIES

Canine

BREED

Bichon Frise X

SEX

Spayed Female

AGE

2014

WEIGHT

15 Pounds

INTERPRETED BY

Kathleen Sennello DVM, MS, Diplomate ACVIM (Small Animal Internal Medicine)

HOSPITAL NAME

Bel Air VH

REFERRING VET

Dr. Young

INVOICE

25211

PRESENTING CLINICAL SIGNS

Recurrent episode of decreased energy, trembling/shaking and not wanting to walk around yesterday (9/3/21). Appetite, urination and defecation still normal, no vomiting or diarrhea. Initial episode occur in June 2021, for which Telsa went to the ER. Radiographs and lab work were unremarkable, except mild ALP increase, at that time. Telsa responded to treatment with Famotidine for 3-5 days and a dose of buprenorphine. Yesterday, on physical examination Telsa demonstrated mild pain upon cranial abdominal palpation, and other wise had an unremarkable exam. Surgical excision of a Lymphoplasmacytic dermatitis mass for the paw on 8/5/2021. At that time pre-surgical Serum bile acids were normal, as was CBC. ALP slightly higher than in June 2021.

Current Medications: Carprofen 25mg: 1/2 tab PO BID for 3-5 days started 9/3/21. Famotidine 10mg: 1 tab PO BID for 3-5 days started on 9/3/21. Heartgard and NexGard monthly.
Lab Results: June 2021: ALP 476 U/L. July 30 2021: ALP 424 U/L.
August 5 2021: ALP 547 U/L. Full lab work sent via email.
Date of Previous IntraPet Ultrasound: 05/22/2018
Sedation: not needed
Stat Report: not requested

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

The left kidney has a normal shape and size (3.93 cm). Overall echogenicity is normal with mildly reduced corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. Non-obstructive pinpoint nephroilths were noted. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (4.17 cm). Overall echogenicity is normal with mildly reduced corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. Non-obstructive pinpoint nephroilths were noted. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.55 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

The right adrenal gland is normal in size measuring 0.55 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

Spleen

The spleen is subjectively normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

Liver
The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is mildly heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are primarily anechoic. The cystic and common bile ducts are normal/not visible.

Gastrointestinal
The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. Jejunum wall measured 0.24 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

Pancreas
The pancreas is normal and isoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

Free Abdomen
Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

ULTRASONOGRAPHIC FINDINGS

- Mildly heterogeneous liver – The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy.

- Mildly reduced corticomedullary distinction in both kidneys with non-obstructive nephroliths – Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis. The hyperechoic mineralized foci observed at the corticomedullary junction of the left/right kidney are consistent with small, non-obstructive nephroliths.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The changes observed in the liver and kidneys are very mild and non-specific, and are unlikely to be responsible for the reported symptoms. Consider referred back/neck pain (?). It is possible for a pet to have pancreatitis/pancreatic inflammation that Is not evident on ultrasound, but without any GI signs this seems less likely.

Mild elevation in ALP with normal bile acids (as of 8/21) is likely due to a vacuolar hepatopathy, or may be very early Cushings (?). You could consider a fine needle aspirate of this liver, and this is recommended if values continued to rise. With an ALP elevation, I consider these factors.

- Induction phenomena are the most common cause for an elevation in ALP. These are systemic illnesses that 'turn on' the liver enzyme. Causes of this include Cushing's disease, dental disease, arthritis, and numerous others. In many cases the exact cause is unclear but as long as ultrasound and bile acids tests are normal most patients do not have progressive changes in their liver. While liver biopsy is not routinely performed, vacuolar hepatopathy, is noted on most biopsies. This is often non-progressive but in rare cases can be more severe and lead to liver failure.

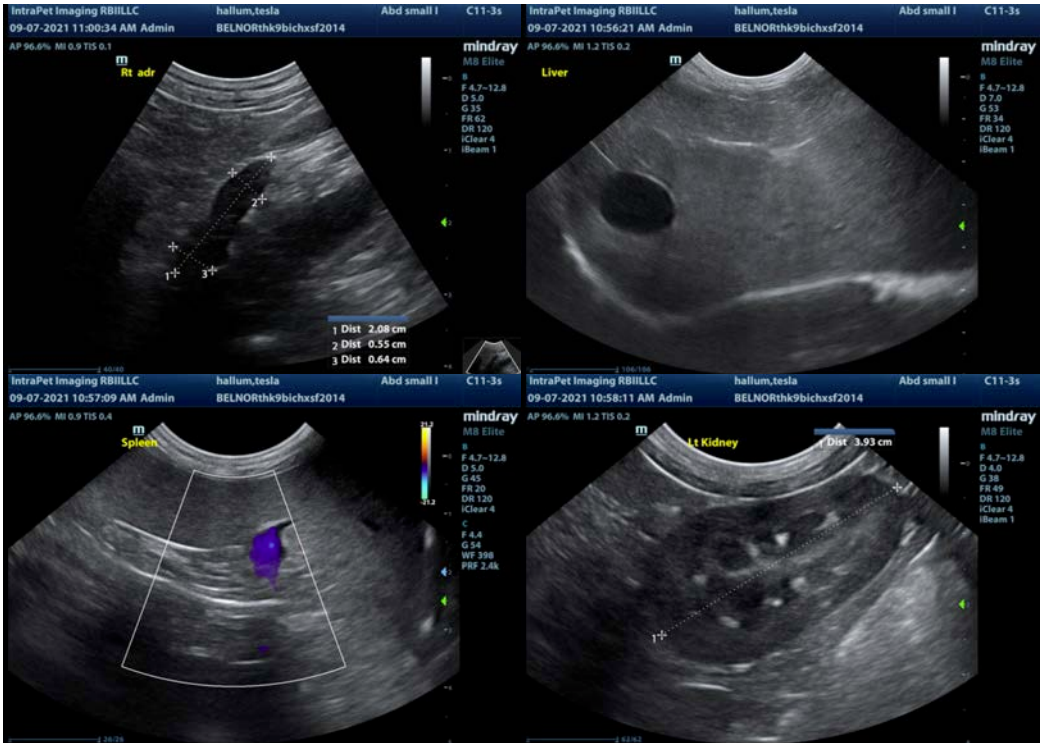
- If signs of cushings disease are present recommend endocrine function testing to evaluate for cushings disease.

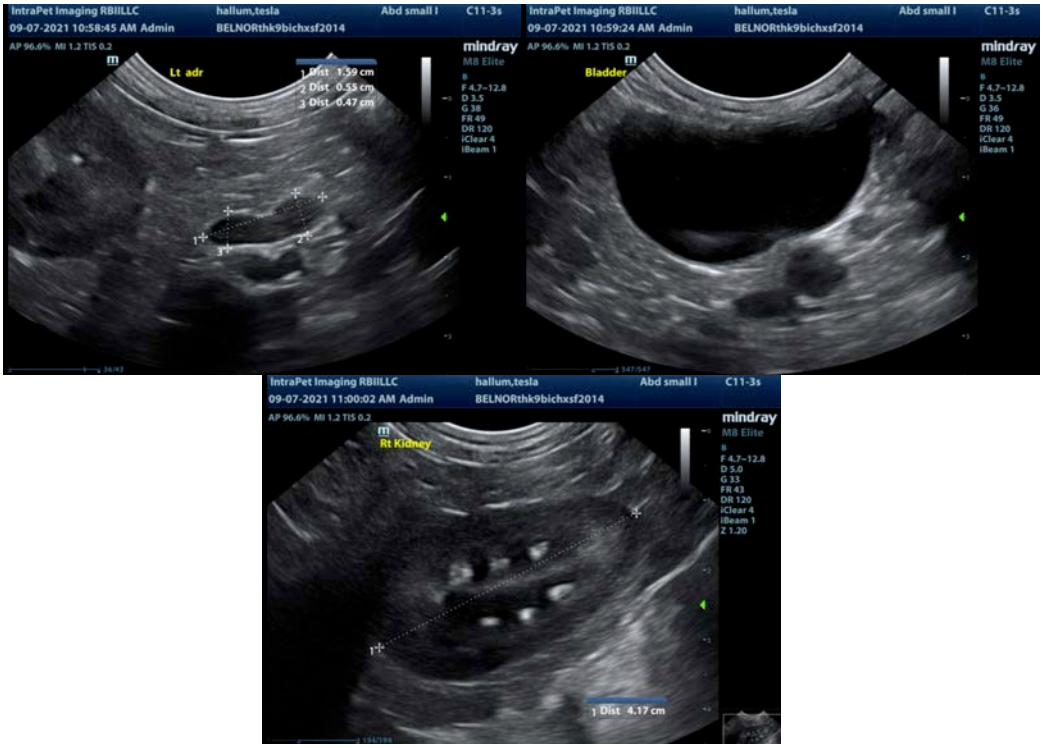
- Consider fine needle aspirate to rule out round cell neoplasia -if this is a concern.

- If a cause for the ALP elevation is not identified: I recommend recheck general blood work every 6 months, ultrasound once per year, and bile acids test every 1-2 years based on other results. If the ALP continues to climb a biopsy could be considered.

- Consider long term use of denamarin, and monitoring for the signs of cushings developing.

- A primary vacuolar hepatopathy can be breed related and is seen in Scottish Terriers, Schnauzers, Cocker spaniels etc.





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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