IMAGING PERFORMED BY

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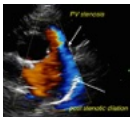

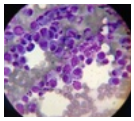

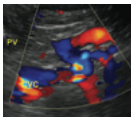

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DATE

7/17/23

PATIENT

Dean Gust

SPECIES

Canine

BREED

Beagle X

SEX

Neutered Male

AGE

5/20/10

WEIGHT

22 Pounds

INTERPRETED BY

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

HOSPITAL NAME

Everhart Vet Hospital

REFERRING VET

Dr. Hays

INVOICE

10338

PRESENTING CLINICAL SIGNS

Patient presented for routine wellness in June, previous history of mild ALT (121) and ALP (218) elevation. No symptoms related to liver value elevation reported. Routine labs showed progression of liver value elevation, ALT now 326 and ALP now 449, USG of 1.012.

Current Medications: None listed.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Andi Parkinson, BS, RDMS.

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 prostate is normal in size (0.72 cm) and shape for this neutered male dog. The parenchyma is homogenous, and the external margins are smooth. The prostatic urethra appears normal with no evidence of irregularity, invasion, mass effect, or calculi.

The left kidney has a normal shape and size (4.84 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex: medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (5.13 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex: medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.71 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 large and irregular in shape measuring 0.88 cm in width at the cranial pole, 0.57 cm at the caudal pole, and 2.12 cm in length. It is visualized in its normal position between the right kidney and the caudal vena cava. It is abnormal in appearance in that there is an irregular hyperechoic nodule in the cranial pole measuring approximately 0.81 cm x 0.7 cm. No evidence of vascular invasion is visualized.

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 homogenous echotexture. 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 mild and 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. The duodenum measured as normal (between 0.5 cm), and the jejunum measured as normal (0.43 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.

PRIMARY FINDINGS

- Hyperechoic nodule in the cranial pole of the right adrenal. The significance of this is unclear. This is currently most consistent with a benign lesion (hyperplasia, adenoma, etc.) but an early neoplastic lesion cannot be definitively ruled out (carcinoma, pheochromocytoma, lymphomas, other).

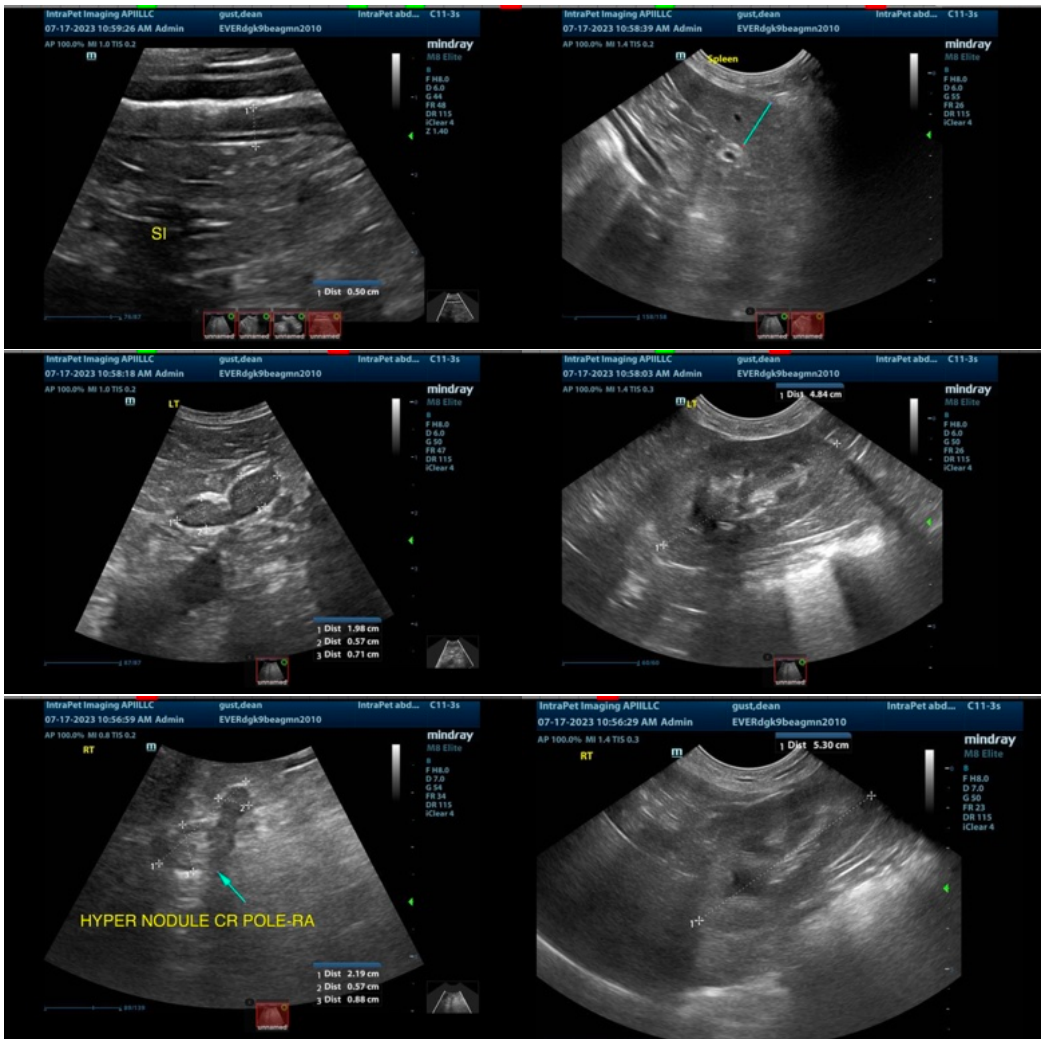
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No focal lesions are visualized associated with the liver or the biliary tract to explain the liver enzymes elevations reported. Findings could be consistent with a primary hepatopathy. Consider the possibility of a liver function test (pre- and post-pre-prandial bile acids), +/- fine needle aspirate of the liver.

Additionally, there is an ill-defined hyperechoic nodule associated with the cranial pole of the right adrenal. This could be secreting hormone and causing some elevations in the liver enzymes although typically in this situation you are going to see primarily an ALP evaluation and both the ALT and ALP appear moderately evaluated. General appearance of the nodule at this time is most consistent with a benign lesion. Recommend a blood pressure evaluation and continued montoring with ultrasound in the very least (recheck in 2-3 months). Alternately, if there are signs of hormone excess you could consider an adrenal

function testing and/or a contrast CT scan of the right adrenal.

Recommend three view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement.



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.

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