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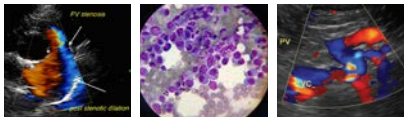

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
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DATE

9/28/22

PATIENT

Stig Beck

SPECIES

Canine

BREED

Mixed

SEX

Neutered Male

AGE

9/20/08

WEIGHT

39 kg

INTERPRETED BY

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

IMAGING PERFORMED BY

Andi Parkinson RDMS

HOSPITAL NAME

Nexus Vet Specialists

REFERRING VET

Dr. Steele

INVOICE

41711

PRESENTING CLINICAL SIGNS

Progressive cholestatic liver enzyme elevation first noted in June 2021. Mild total hypercalcemia (iCa pending today). Additional history of chronic skin issues and arthritis. Hepatomegaly palpable on exam and noted on rDVM rads. Questionably mild PUPD.

Current Medications: Apoquel 16mg once daily, Dasuquin advanced once daily, Topical chlorhexidine mousse

Lab Results: 9/10: glob 4.0, ALT 199, ALP 1010, chol 399, tCa 11.6
5/25: glob 4.0, ALT 120, ALP 769, chol 367, tCa 11.6, unremarkable CBC, normal T4 at 1.4. UA—USG 1.020, pH 7.0, 2+ protein (UPC pending today)
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Patient sedated with Torbugesic.
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 visualized areas of prostate and surrounding tissue appear normal. Unfortunately, the prostate is not fully visualized likely due to its intrapelvic location. Correlate with rectal exam findings.

The left kidney has a normal shape and size (6.93 cm). Overall echogenicity is slightly hyperechoic with poor 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 (6.17 cm). Overall echogenicity is slightly hyperechoic with poor 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 large, measuring 0.37 cm at the cranial pole, 0.95 cm at the caudal pole, and 2.76 cm in length. It is observed in its normal position cranial to the left renal artery. It is somewhat abnormal in appearance in that three is a hyperechoic mass effect at the caudal pole measuring 1.08 cm x 0.88 cm. There is no obvious evidence of vascular invasion.

The right adrenal gland is large, measuring 2.13 cm at the cranial pole, 0.60 cm at the caudal pole, and 3.76 cm in length. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is somewhat abnormal in appearance in that there is a hyperechoic mass effect at the cranial pole measuring 2.4 cm x 2.07 cm. No evidence of vascular invasion.

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 large in size, and normal in echogenicity with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. There is a hyperechoic mass effect deep on the left side of the liver measuring 3.14 cm x 2.44 cm. This does not appear to disrupt the normal hepatic architecture.

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 0.3-0.5cm in wall thickness) and the jejunum measured as normal (between 0.2-0.47cm.) 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. There is a small cluster of prominent lymph nodes in the hilar region. One lymph node appears cystic, measuring 1.1 cm.

Other
A brief view of the heart was submitted. No significant pericardial effusion was seen, but the caudal vena cava does appear somewhat prominent.

ULTRASONOGRAPHIC FINDINGS

- Decreased corticomedullary distinction in both kidneys – The bilateral renal findings are consistent with age-related change.

- Hyperechoic mass effects in the caudal pole of the left adrenal gland and the cranial pole of the right adrenal gland – These changes could be due to benign disease such as hyperplasia, adenoma, etc., or could represent neoplastic lesions such as carcinoma, pheochromocytoma, or metastasis.

- Large, heterogeneous liver with hyperechoic mass lesion – 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. The hyperechoic appearance of this lesion trends towards a more benign appearance. Recommend continued monitoring.

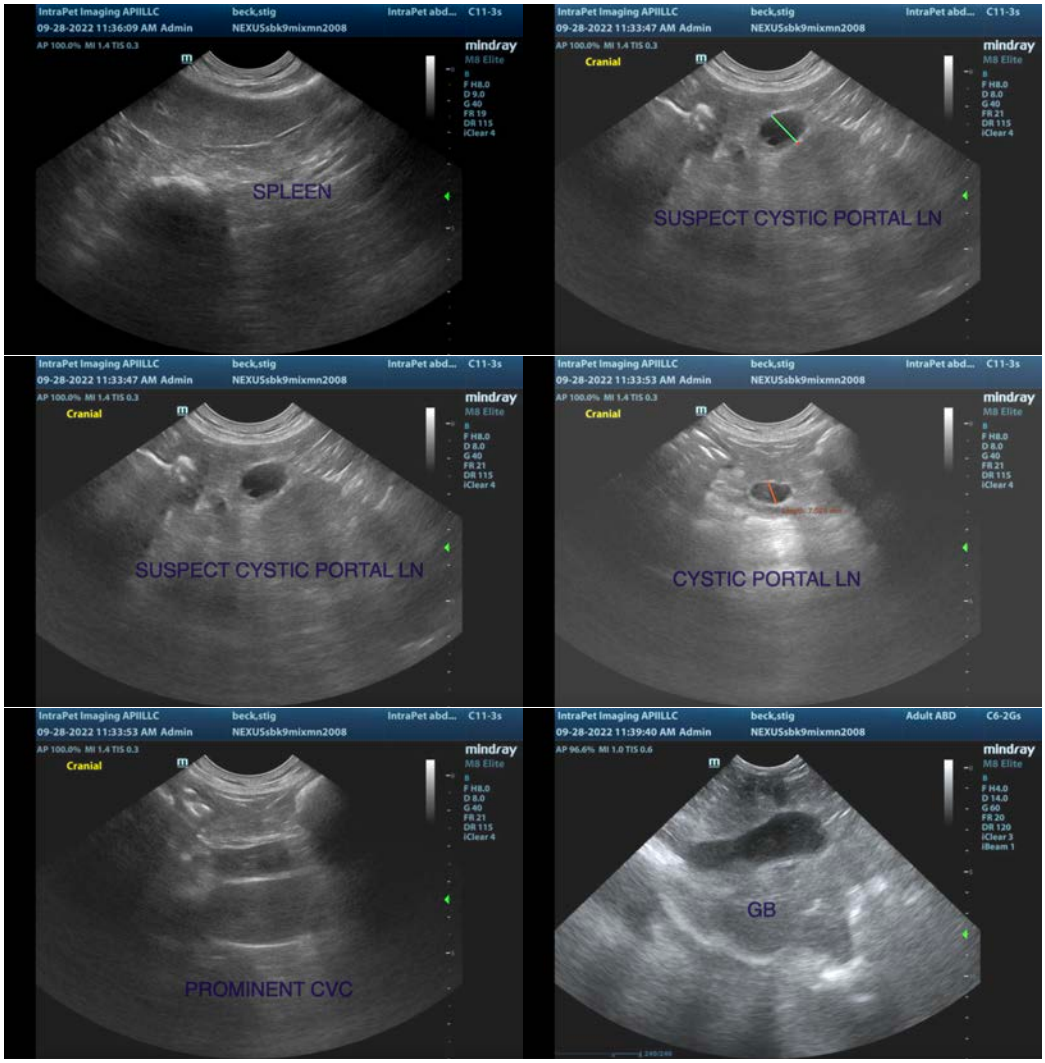
- Prominent vena cava – The significance of this is currently unclear.

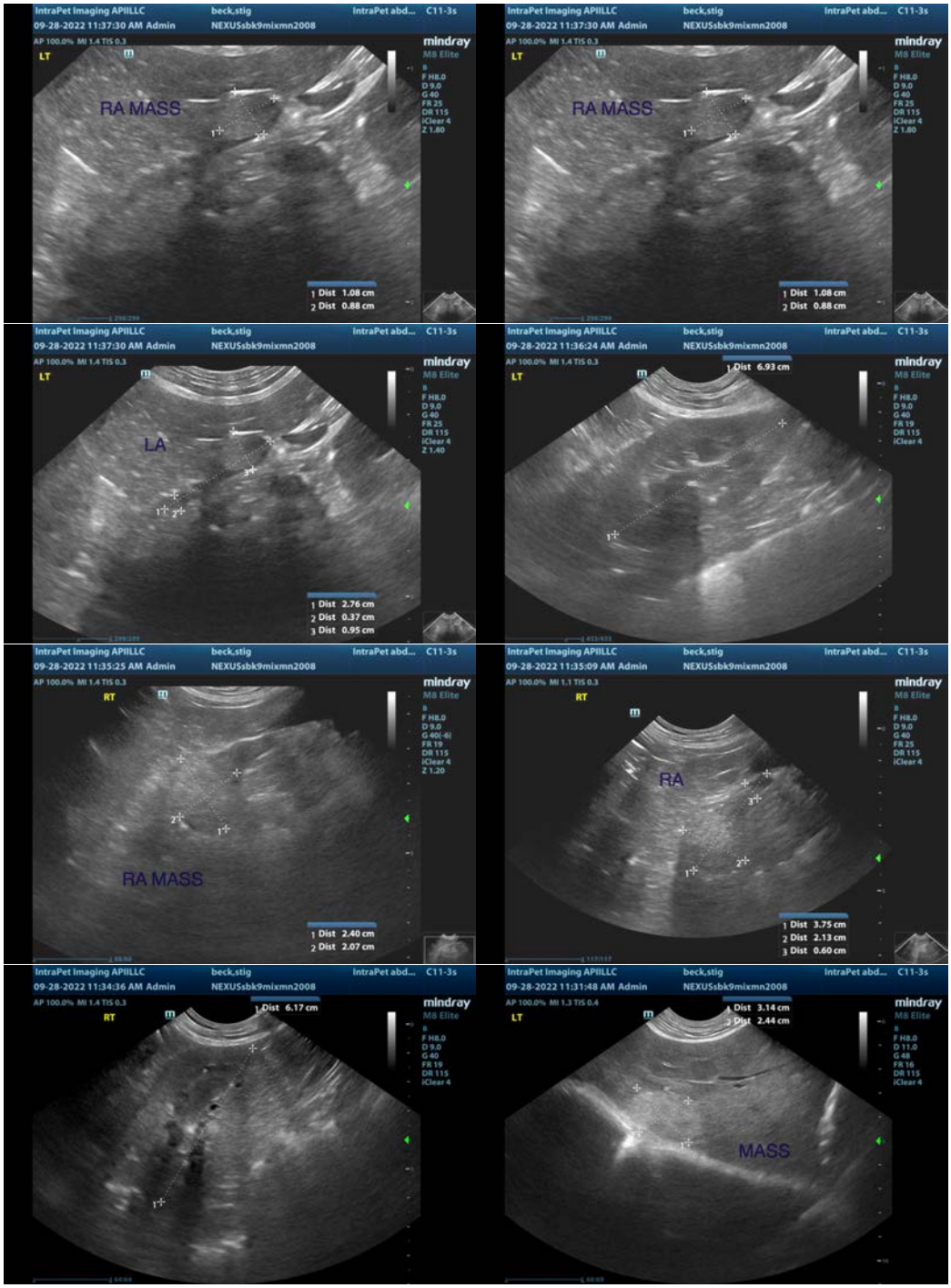
- Prominent/cystic lymph nodes at hilar region – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Significant ultrasonographic lesions on today's exam are a large heterogeneous liver, hyperechoic nodules/masses in both the left and right adrenals, prominent lymph nodes in the hilar region (one cystic), age related change in both kidneys, and a prominent vena cava with no obvious evidence of cardiac disease on a brief evaluation.

Further diagnostic and therapeutic recommendations regarding this exam to be made by Dr. Cara Steele.

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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.

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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kathleen.sennello@sonopath.com