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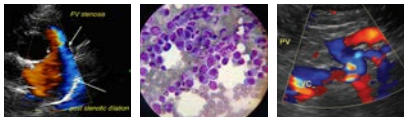

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DATE

1/18/23

PATIENT

Max Modo

SPECIES

Canine

BREED

German Shepherd

SEX

Intact Male

AGE

7/24/14

WEIGHT

73.2 Pounds

INTERPRETED BY

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

HOSPITAL NAME

Pleasantville AH

REFERRING VET

Dr. Gounaris

INVOICE

44280

PRESENTING CLINICAL SIGNS

Presented 1/17/2023 for Acutely ADR, somewhat lethargic, inappetence. Main finding on PE is a slightly pendulous abdomen with fluid wave as well as tachycardia 150 - 160 BPM. After diagnostics, intermittent V-Tach is apparent with VPCs occasionally during NSR, potential metastatic lesions lung fields, abdominal free fluid/hemoabdomen on US guided FNA.

Current Medications: None at this time.
Lab Results: blood chemistry and CBC largely WNL, PCV 40% TS 6. EKG NSR with sinus tachycardia with occasional VPC,s and short runs of VTACH that resolve spontaneously
Radiographs: potential metastatic lesions thorax, lack of serosal detail abdomen. AFAST reveals free abdominal fluid, blood aspirated from pocket PCV 45% and TS 5
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Rachel Brilhart, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is mildly distended with anechoic urine. The Bladder wall is diffusely mildly thickened (1.42 cm), and the mucosa is mildly irregular. The trigone, ureteral papillae, and visible urethra (to a depth of 2cm) appear normal with no evidence of severe mucosal irregularities, masses or cystic calculi. Findings are most consistent with bacterial cystitis or lack of urine distension. Recommend urinalysis and culture.

The prostate is large, heterogeneous, hyperechoic, and mildly cystic, measuring 4.1 cm x 6.2 cm. The prostatic urethra appears normal with no evidence of irregularity, invasion, mass effect or calculi.

The left kidney is normal in size but slightly irregular in shape, measuring 8.04 cm in length. 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. There are two lesions visualized within the cortex of the left kidney. One rounded, hypoechoic, mixed echogenic lesion measured 1.35 cm x 1.28 cm. A second more solid appearing echogenic nodule measures 1.33 cm x 1.12 cm.

The right kidney is normal in size and shape (6.91 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 0.86 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 0.76 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. The spleen echotexture is heterogenous and mottled, the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears

normal. There is an irregular, hypoechoic, almost moth eaten appearing nodule visualized in the cranal third of the spleen, measuring 1.2 cm x 1.13 cm.

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 mixed echogenic nodule visualized in the right side of the liver, measuring 3.13 cm in diameter. Additionally, there is a large, mixed echogenic, hyperechoic mass lesion measuring 6.34 cm x 5.6 cm on the right side of the liver.

The gall bladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. There is a moderate amount of non-organized echogenic debris. 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 prominent and mottled compared to the surrounding isoechoic mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

Free Abdomen

There is a moderate to large amount of free abdominal fluid. No lymphadenopathy. The omentum is diffusely hyperechoic.

Other

A brief view of the heart was submitted. No significant pericardial effusion was seen.

Both testicles were visualized and appear within normal limits.

Ringdown artifact is visualized at the level of the diaphragm.

PRIMARY FINDINGS

- Large, hyperechoic cystic prostate – Prostatic changes are most consistent with benign prostatic hyperplasia. Other differentials include bacterial prostatitis and prostatic neoplasia. However, given the lack of lower urinary tract symptoms, these differentials are considered less likely in this patient.

- Two mixed echogenic lesions visualized in the left kidney – The more echogenic lesion is most consistent with a renal nodule. The more hypoechoic lesion could represent a nodule or an

echogenic cystic structure.

- Mottled spleen with hypoechoic nodule – The diffuse splenic changes are non-specific and could be consistent with lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive diagnosis.

- Large, heterogeneous liver with a small mixed echogenic mass effect and a larger hyperechoic mixed echogenic mass effect – Findings are concerning for possible metastatic neoplastic lesions.

- Ringdown artifact visualized at the level of the diaphragm – This is suggestive of pulmonary parenchymal disease. Correlate with 3-view thoracic radiographs.

SECONDARY FINDINGS

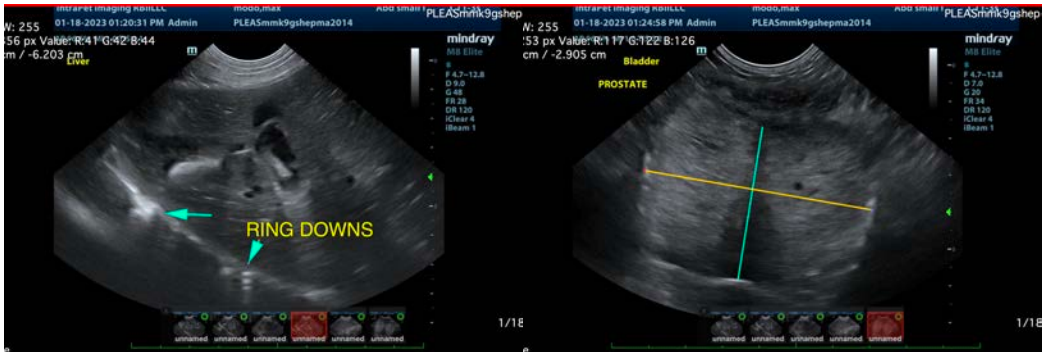
- Thickened, non-distended urinary bladder – The bladder mucosal changes could be consistent with cystitis or artifactual due to lack of adequate luminal distension. Bladder neoplasia cannot be ruled out but is considered unlikely in this patient.

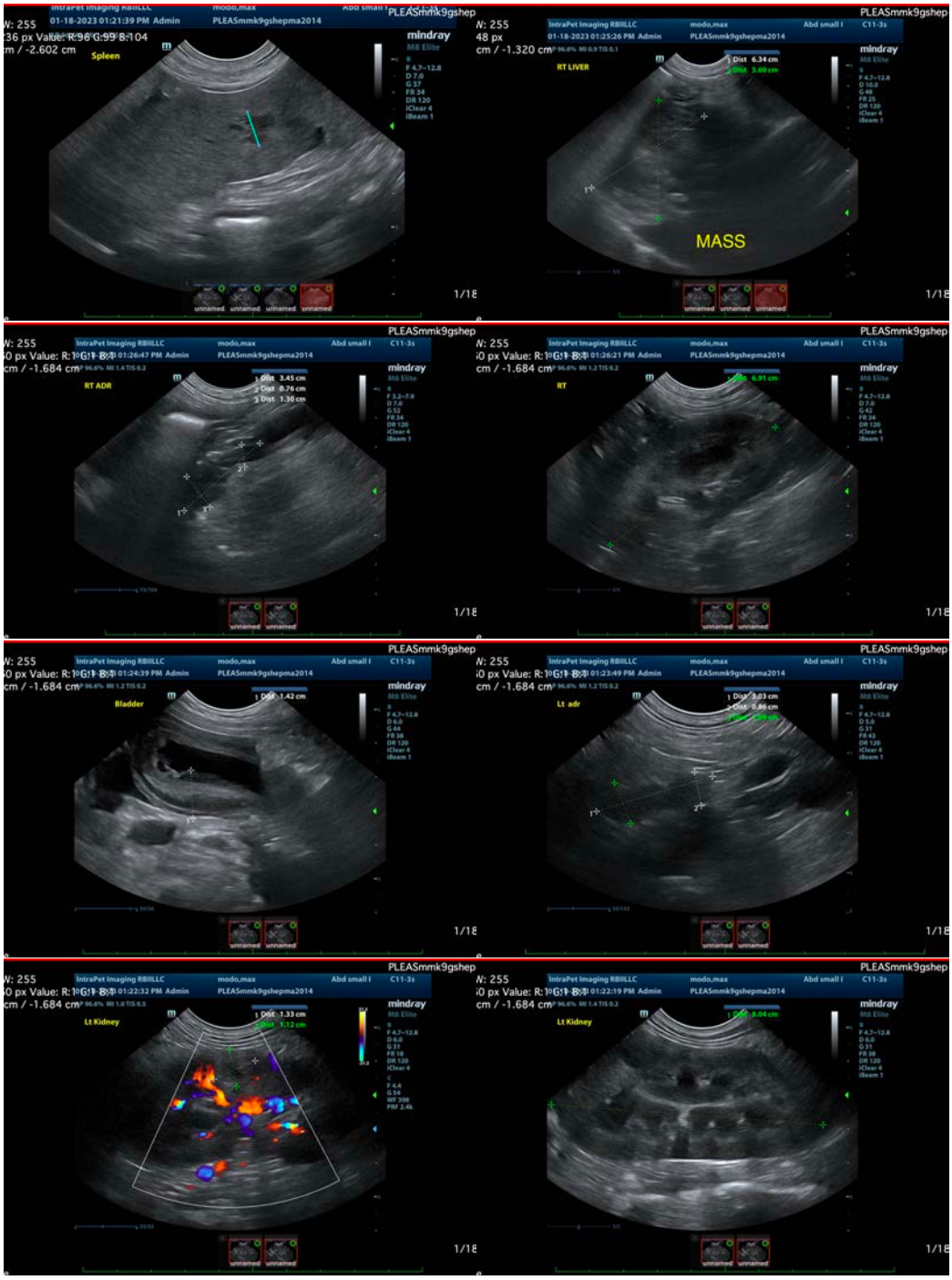
- Prominent, mottled pancreas – The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

- Moderate gallbladder debris – The significance of the aggregated gallbladder debris is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting but seems unlikely to be causing a current issue. Recommend continued monitoring.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There are suspected nodules/lesions visualized in the spleen, liver, and left kidney. The source of the hemorrhage is not definitively visualized, but the large hepatic mass on the right side would be the primary suspect. Some of these lesions could be benign and non-related, but there is high concern with the concurrent hemoabdomen that these lesions represent metastatic neoplasia. A fine needle aspirate of the liver mass could be considered.

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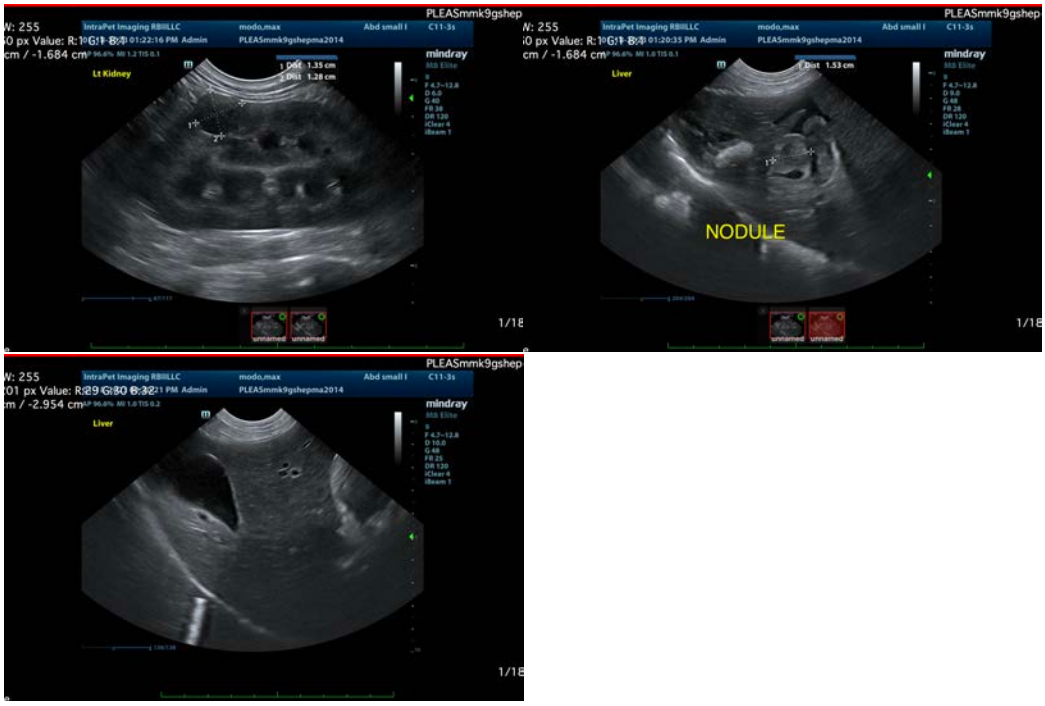

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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