IMAGING PERFORMED BY

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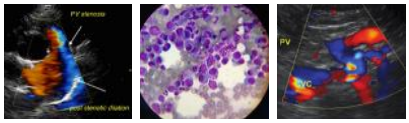

SonoPath
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DATE

10/14/21

PATIENT

Keela Egan

SPECIES

Canine

BREED

Puggle

SEX

Spayed Female

AGE

2010

WEIGHT

32.2 Pounds

INTERPRETED BY

Andrea Nicastro, DMV, Diplomate DACVIM (Small Animal Internal Medicine)

HOSPITAL NAME

Healing Paws VWC

REFERRING VET

Dr. Preston

INVOICE

13751

PRESENTING CLINICAL SIGNS

History: Seen on 10/7/21 to check some lumps owner was feeling on patient. Patient does have some lipomas present, however palpated a very large mass in patient's cranial abdomen at the appointment. Radiographs showed a large mass in cranioventral abdomen behind the liver and below the abdomen. Patient is getting much more picky with food as well. No vomting/diarrhea.
Current Medications: None currently.
Lab Results: Lab results pending.
Radiographs: Radiographs show a very large, possibly bi-lobed mass in cranio-ventral abdomen just caudal to stomach.
Date of Previous IntraPet Ultrasound: No previous
Sedation: Not needed.
Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The bladder is moderately distended. The wal is normal in thickness with a smooth mucosal surface. A small amount of aggrevated echogenic to mineralized sand +/- a tiny calculus is observed within the lumen. The region of the trigone is normal. The proximal urethra is diffuselt thickened (up to 0.78 cm in diameter) and exhibits mild heterogeneity. Foci of mineralization are observed within the urethral wall. The urethral lumen is not overtly dilated.

The left kidney presented normal size (5.77 cm in length); with a normal shape, smooth peripheral margins and normal internal architecture. There is mild to moderate loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

The right kidney presented normal size (6.09 cm in length); with a normal shape, smooth peripheral margins and normal internal architecture. There is mild to moderate loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal size (0.39 cm at cranial pole) (0.54 cm at caudal pole) (2.52 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 (0.60 cm at cranial pole) (0.44 cm at caudal pole) (2.10 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

A >11.0 cm irregular, heterogeneous mass. Foci and mineralization are observed within the mass. In the remainder of the spleen, the contours are curvilinear and the parenchyma is homogeneous. Splenic

vasculature appears normal with no evidence of thrombosis.

Liver

The liver is subjectively prominent in size with swollen peripheral contours. The parenchyma is hypoechoic relative to the spleen and diffusely heterogeneous in appearance with numerous ill-defined hypoechoic nodules/areas, the largest measuring 1.74 cm x 1.22 cm. A few hyperechoic areas are also seen. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.
The gall bladder is of normal contours and contains some gravity dependent echogenic debris. The wall is normal in thickness. No choleliths are observed. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The gastric lumen is not distended. There is questionable invasion of the splenic mass into the wall of the greater curvature of the stomach. The wall of the lesser curvature appears normal in thickness with a normal layering pattern. The pylorus is mildly thickened with retention of the normal layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall is normal in thickness with a normal layering pattern and appropriate mural detail. The colonic wall is normal. There is no evidence of an obstructive pattern.

Pancreas

The right limb of the pancreas is visible with normal curvilinear peripheral contours. The parenchyma is largely isoechoic relative to surrounding omental fat and slightly mottled in appearance. The pancreatic duct is visible but not overtly dilated. There is no evidence of peripancreatic inflammation or effusion.

Free Abdomen

The mesentery throughout the abdomen is hyperechoic. A small amount of free fluid is observed. The abdominal lymph nodes are normal/not visible.

Other

A brief echocardiogram reveals no evidence of pericardial effusion or obvious right atrial/auricular mass.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Large splenic mass with questionable invasion into the gastric wall. Neoplasia (i.e., sarcoma, round cell tumor) is considered likely with a low possible of benign pathology.
- Diffuse peritonitis is present, likely secondary to the presence of the mass.
- The hepatic parenchymal changes are non-specific and could be secondary to benign age-related pathology. Alternatively, metastatic disease may be present. Histopathology would be necessary to differentiate between benign and malignant disease.
- Urinary bladder sand +/- tiny calculus
- The thickened urethral wall could be consistent with infiltrative neoplasia (i.e., transistitional cell carcinoma) or severe urethritis (i.e., secondary to urinary tract infection).

Secondary Findings

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

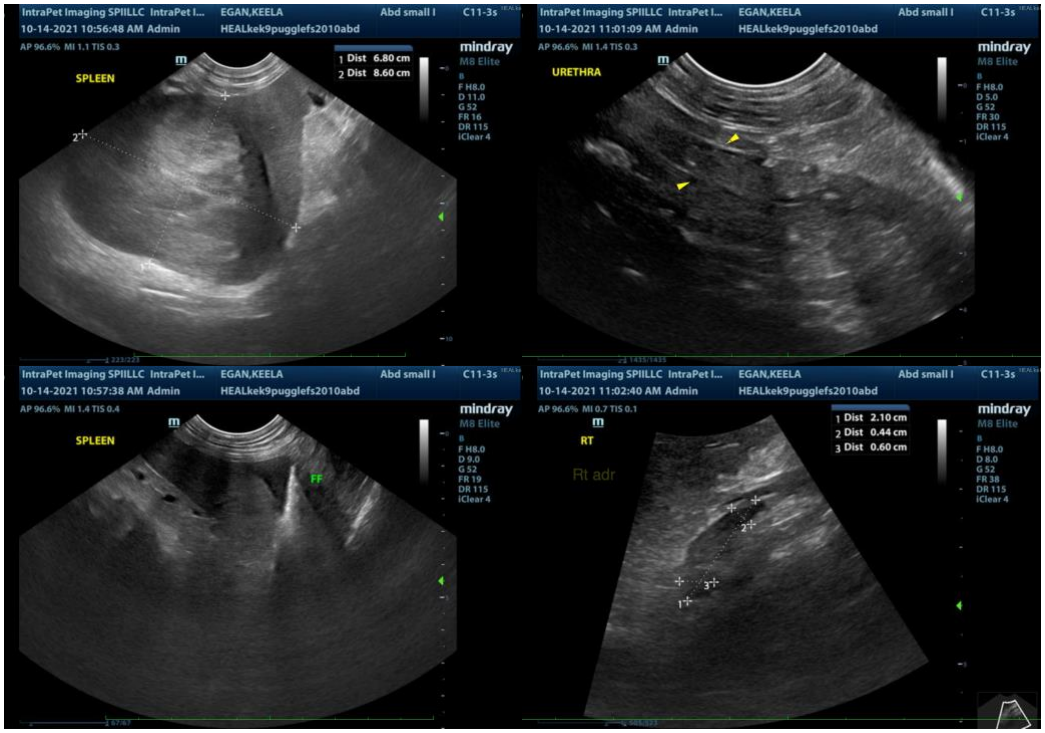
- Bilateral age-related nephropathy with dystrophic mineralization

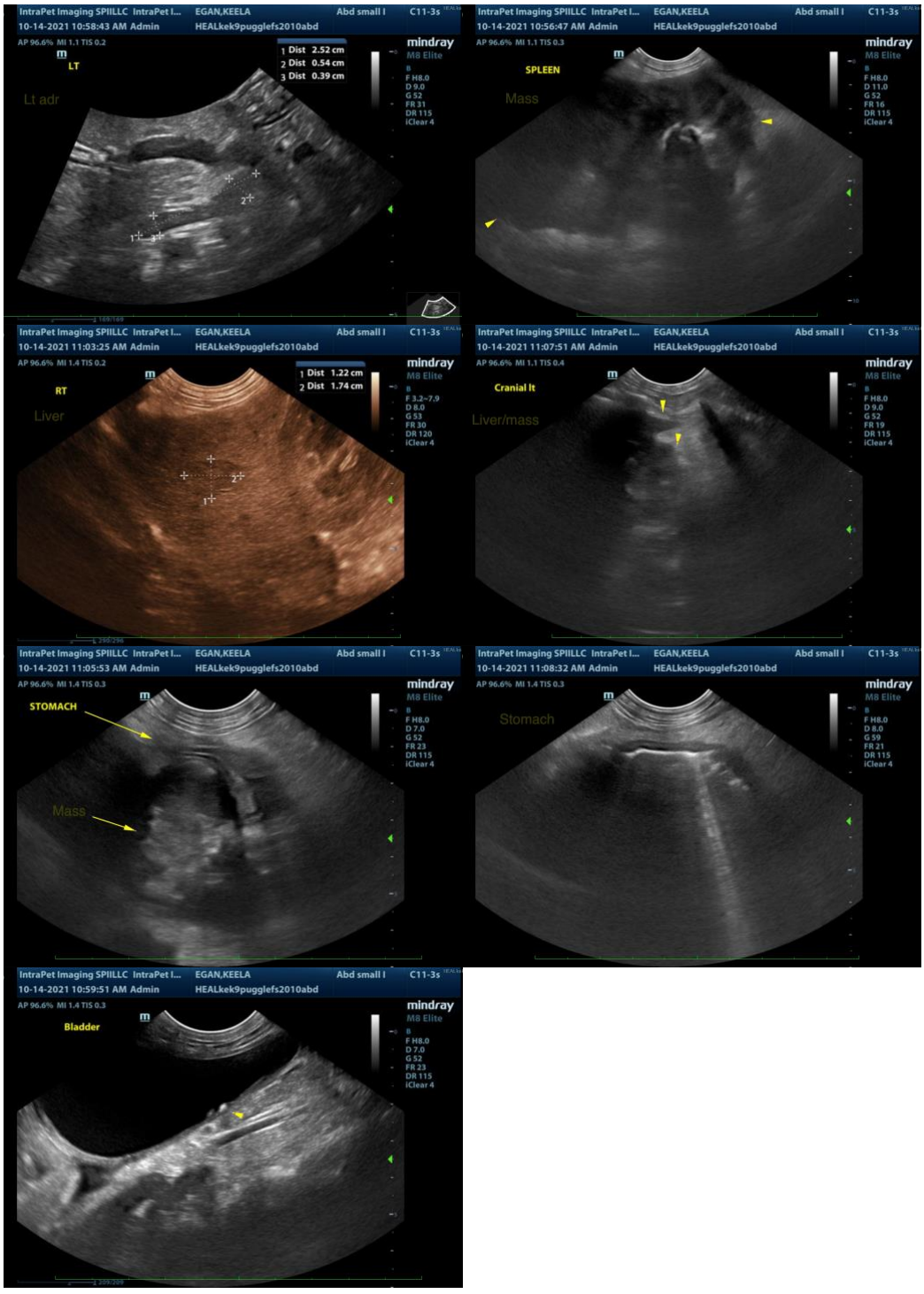
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Three-view thoracic radiographs are recommended to assess for pulmonary metastases.

- A fine needle aspirate of the splenic mass can be considered if clotting status is appropriate. A 25-gauge needle should be used. Ultimately, a splentectomy with submission of the spleen for histopathology may be necessary to get a definitive diagnosis. If surgery is pursued, a liver biopsy should also be obtained to assess for micrometastatis. An abdominal CT scan would be useful in presurgical planning, particularly in determining invasiveness of the mass.

- Consider a urine BRAF test to further evaluate for lower urinary tract neoplasia





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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