



PATIENT PRESENTING CLINICAL SIGNS

Sweet Pea Paxson

History: Presented at our hospital for seizures. P had two seizures today, never had them previously. First one was after male owner walked dog, seemed sluggish on walk, then when he got home- he collapsed; no spastic movement at that time; female owner then came home around 2:30, though dog seemed okay, took a nap with dog, and was awoken by dog thrashing/ drooling on bed

SPECIES

Canine

Previous Health Concerns: Pneumonia 2022

Current Medications: None

BREED

Mini Dachshund

Abnormal PE/Chem/CBC/UA Results

Cardiovascular: 4/6 heart murmur

Abdominal: full cranially, thin skin ventral abdomen

rad- lateral only- cardiomegaly and hepatomegaly noted; pulmonary edema; no obvious abdominal effusion; probable thickened bowel loops

SEX

Neutered Male

CBC-neutrophilic leukocytosis (17.8/ 19.1) stress leukogram

EPOC- iCa 1.13(L0 BUN 33 (H) lactate normal

Pre-surg- ALT 533 (H) ALP 472(H)

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

AGE

15yr

Urinary System

The **urinary bladder** is moderately distended. The wall is normal in thickness with a smooth mucosal surface. At least 2 small cystic calculi are visualized (the largest measuring 0.31 cm in diameter). The remaining luminal contents are mostly anechoic. The region of the trigone and the visible portion of the proximal urethra are normal.

WEIGHT

7.2kg

The cranial portion of the **prostate** is visualized and is normal in size (0.89 cm in width) with a normal shape and homogenous parenchyma. The prostatic urethra is not overtly dilated.

INTERPRETED BY

Andrea Nicastro, DVM,
Diplomate ACVIM
(Small Animal Internal
Medicine)

The **left kidney** is normal size (4.76 cm in length); normal shape and architecture with smooth peripheral margins. The cortex is mildly thickened and there is moderate loss of corticomedullary distinction. Hyperechoic shadowing diverticular foci are visualized. Mild to moderate pyelectasia is present (0.22 cm in the longitudinal plane). There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

IMAGING PERFORMED BY

Erin Wicks

The **right kidney** is normal size (4.72 cm in length); normal shape and architecture with smooth peripheral margins. The cortex is mildly thickened and there is moderate loss of corticomedullary distinction. Hyperechoic shadowing diverticular foci are visualized. Trace pyelectasia is present. There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

HOSPITAL NAME

Shores Vet Emerg Ctr

Adrenal Glands

The **left adrenal gland** is enlarged (1.47 cm at cranial pole) (0.90 cm at caudal pole) (2.75 cm in length); with an irregular shape. The parenchyma at the cranial pole is heterogenous with loss of glandular detail. At the caudal pole, there is normal glandular detail. The phrenicoabdominal vein and surrounding vasculature appear normal.

REFERRING VET

Dr Lupole

The **right adrenal gland** is evaluated. It is not definitively visualized in the available images. No obvious pathology is observed in this region.

INVOICE

11521

Spleen

The **spleen** is normal in size (1.05 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

DATE

8.31.22

Liver

The **liver** is subjectively enlarged with swollen, irregular peripheral contours. On the left side, a 3.86 x 3.47 irregular, hypoechoic cavitated mass is visualized at the cranial aspect. The lesion causes capsular expansion. Surrounding mesentery is hyperechoic. The remaining parenchyma is isoechoic relative to the spleen and mildly heterogenous in appearance. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

The **gall bladder** is moderately distended. The wall is normal in thickness. A few polypoid lesions are arising from the luminal surface. A small amount of aggregated, echogenic to mineralized, mostly gravity dependent debris/sludge is observed within the lumen. The cystic and common bile ducts are normal.

Gastrointestinal

The **stomach and intestine** are free of stasis and exhibit normal peristaltic activity. The gastric lumen is not distended. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The wall of the descending colon at the level of the urinary bladder is mildly thickened (up to 0.55 cm) with retention of the normal layering pattern. 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** in the cranial abdomen is hyperechoic. Trace free fluid is observed between the lobes. The abdominal **lymph nodes** are normal/not visible.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Left hepatic mass. Neoplasia (i.e., hemangiosarcoma, hemangioma) is considered less likely with a lower possibility of a benign process (i.e., abscessation). The diffuse hepatic parenchymal changes are nonspecific and could be secondary to a benign age-related process (i.e., regenerative nodular hyperplasia) with a lower possibility of metastatic disease or other hepatopathy. Cranial peritonitis is present, likely due to the presence of the mass.
- Cystic calculi

Secondary Findings

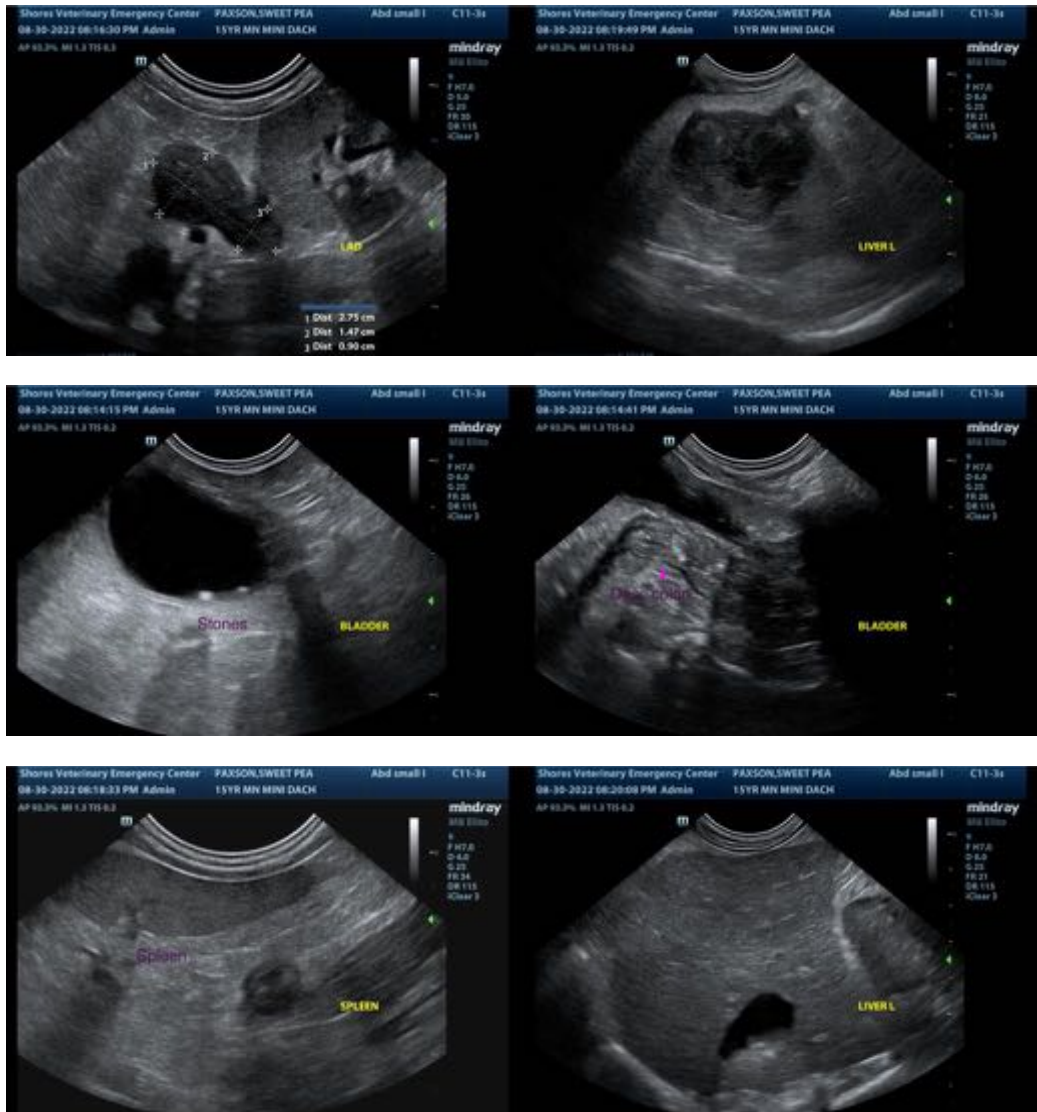
- The bilateral renal changes are consistent with chronic interstitial nephrosis/nephritis with dystrophic mineralization and pyelectasia.
- The left adrenomegaly may be secondary to hyperplastic change or an emerging tumor. The right adrenal gland is not visualized for comparison.
- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

- The descending colonic wall thickening is most consistent with inflammation with a lower possibility of emerging neoplasia.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Three-view thoracic radiographs are recommended to assess for pulmonary metastases. If there is no evidence of pulmonary metastatic disease, consider hepatic mass removal with submission for histopathology. An abdominal CT scan may be useful in presurgical planning. If the patient is stable under anesthesia, a cystotomy with stone removal analysis and culture can also be considered.

Given the sonographic renal changes, consider a urinalysis with urine culture and sensitivity.





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.

Andrea Nicastro, MPH, DVM, Diplomate DACVIM (Small Animal Internal Medicine)
info@SonoPath.com