**DATE PRESENTING CLINICAL SIGNS**

11/16/21

History: Anorexia, lethargy, severe abdominal pain 2-3 days
Urine dribbling/incontinence 2-3 months.

PATIENT

Mr. Nibbles Smith

Current Medications: Cerenia, Enrofloxacin, gabapentin, single dex SP injection 11/15
Lab Results: Anemia, hct 29%, thrombocytopenia, significant reticulocytosis. Mild lymphocytosis with neutrophilia. ALT 455.

U/a-- 1.044 with active sediment including epithelial cells.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required for a full diagnostic ultrasound.

Stat Report: Declined.

SPECIES

Canine

BREED

Terrier Mix

SEX

Male, intact

AGE

2005

WEIGHT

13.2 lbs.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with mostly anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

The prostate is enlarged (2.97 cm length x 2.64 cm width) with a slightly irregular shape. The parenchyma is heterogeneous in appearance. Several cystic areas are observed within the parenchyma, some of which are ill-defined. The prostatic urethra is not overtly dilated.

The left kidney is normal in size (4.61 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. The cortex is mildly hyperechoic with pinpoint hyperechoic to mineralized foci. There is mild loss of corticomedullary distinction. A 0.67 cm septated cortical cyst is present. A few smaller cortical cysts are also seen. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

INTERPRETED BY

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

The right kidney is normal in size (4.62 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. The cortex is mildly hyperechoic with pinpoint hyperechoic foci with a few small cortical cysts, one of which is septated (0.66 cm in diameter). There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

IMAGING PERFORMED BY

Stephanie Pearce
RDCS, RVT

Adrenal Glands

The left adrenal gland is enlarged (0.73 cm at cranial pole) (0.95 cm at caudal pole) (2.03 cm in length) with an irregular shape. The parenchyma is slightly heterogeneous in appearance with some loss of glandular detail. The phrenicoabdominal vein and surrounding vasculature are normal.

HOSPITAL NAME

Eastern Animal
Hospital

The right adrenal gland is enlarged (0.95 cm at cranial pole) (0.94 cm at caudal pole) (1.61 cm in length) with an irregular shape. The parenchyma is slightly heterogeneous in appearance with some loss of glandular detail. The phrenicoabdominal vein and surrounding vasculature are normal.

Spleen**REFERRING VET**

Dr. Sole

The spleen is subjectively normal in size with irregular peripheral contours. Several isoechoic to heterogeneous slightly cystic nodules are observed throughout the organ. Splenic vasculature appears normal with no evidence of thrombosis.

Liver**INVOICE 12552**

The liver is subjectively prominent in size with swollen peripheral contours. The parenchyma is isoechoic relative to the spleen and diffusely mottled and heterogeneous in appearance with numerous varying sized

ill-defined hypoechoic to heterogeneous nodules throughout the organ. Several ill-defined cystic areas are also seen. Vascular and biliary tracts are of normal volume with no evidence of congestion. The gall bladder lumen is moderately distended. The wall is thin and smooth. A moderate amount of aggregated echogenic partially dependent debris/sludge is observed within the lumen. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The gastric lumen is moderately distended with ingesta. The gastric wall in the region of the fundus is normal in thickness with a normal layering pattern. A 3.35 cm segment of gastric wall in the region of the lesser curvature is focally thickened (up to 1.24 cm), hypoechoic to heterogeneous and vascular with a loss of the 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. The colonic wall is normal. No obstructive disease is noted.

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

Trace free fluid is observed. The mesentery in the cranial abdomen is hyperechoic. The abdominal lymph nodes are normal/not visible.

Other

The left testicle is subjectively enlarged (3.26 x 1.76 cm) with a slightly irregular shape. A 1.97 x 1.76 cm hyperechoic to heterogeneous nodule is observed. The remaining parenchyma is slightly heterogeneous in appearance.

The right testicle is normal to slightly small in size (2.23 x 0.95 cm). A 0.95 x 1.18 cm isoechoic nodule is observed within the parenchyma.

ULTRASONOGRAPHIC FINDINGS

Primary Findings:

- The focal gastric wall lesion could be consistent with a polyp, tumor or severe inflammation.
- The diffuse hepatic and splenic nodules could be consistent with infiltrative neoplasia or benign age-related pathology. Cytology or histopathology would be necessary to differentiate these possibilities.
- Cranial abdominal peritonitis is present and may be secondary to pancreatic, gastric and/or hepatic pathology.
- Bilateral testicular nodules, right side greater than left side. Neoplasia is possible with lower possibility of inflammatory or remodeling changes.

Secondary Findings:

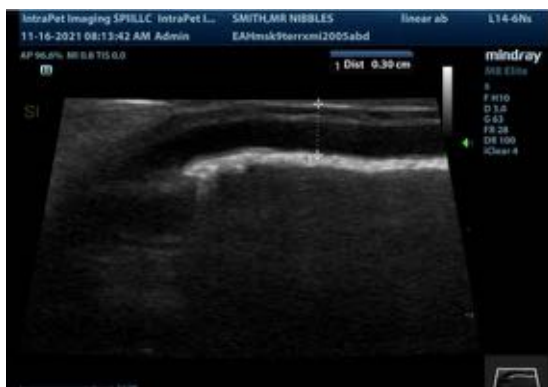
- The pancreatic changes are most consistent with age-related remodeling/fibrosis +/- concurrent inflammation, particularly if the patient is painful in the cranial abdominal region.
- The bilateral adrenal changes are most consistent with hyperplasia.

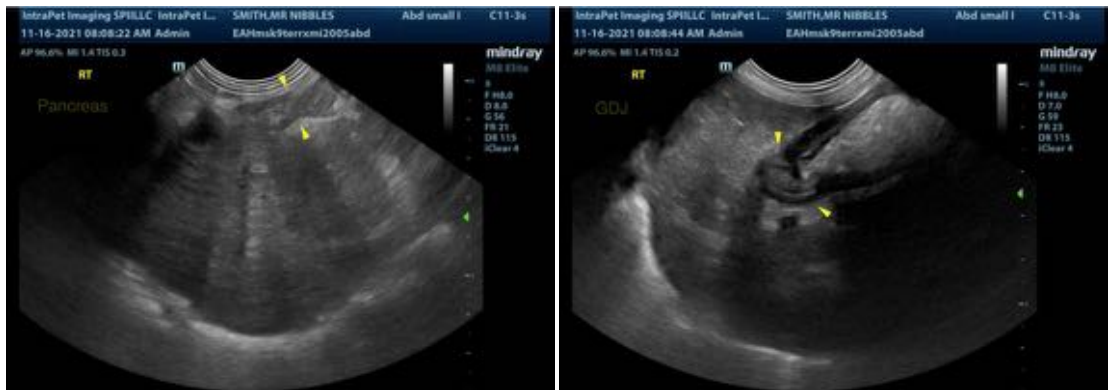
- Bilateral age-related renal changes with dystrophic mineralization and cortical cysts.
- The prostate changes are most consistent with benign prostatic hyperplasia with parenchymal cysts. Concurrent bacterial prostatitis is also possible, particularly if lower urinary tract signs are present.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Given the patient's GI signs, supportive care for pancreatitis/gastroenteritis is recommended.
- Three-view thoracic radiographs are also recommended to assess cardiopulmonary status, particularly given the possibility of intrabdominal neoplasia.
- If the patient's platelet count exceeds 50,000, consider fine needle aspirates of the liver and spleen to further assess for infiltrative neoplasia.
- Ideally, an abdominal exploratory with biopsies of the abnormal gastric wall and liver with splenectomy and castration would be performed. However, given the patient's age, this may not be in the patient's best interest.
- If possible, a urine culture and sensitivity should be submitted on a pre-antibiotic sample.







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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