



PATIENT PRESENTING CLINICAL SIGNS

Sir Fitzgerald Alloway
History: P has been seen at an emergency clinic multiple times the last few weeks. Eating better last few days and finally having hard stools. O elects for AUS to r/o possible causes.

SPECIES
Abnormal PE/Chem/CBC/UA Results: CBC/Chem/cPL/abdominal rads: Mildly increased Amylase (2112 U/L), Mildly increased cPL (235 ug/L). Rads rad in house at emergency clinic as WNL.a
Canine

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

BREED *Urinary System*

Pomeranian
The **urinary bladder** and visible portion of the pelvic urethra are normal for the degree of luminal distension. A 0.25 cm cystic calculus is visualized within the lumen. The remaining luminal contents are anechoic.

SEX
Intact Male
The **prostate** is normal in size (2.08 cm in width) with a normal shape and smooth peripheral contours. Parenchyma is hyperechoic relative to surrounding omental fat. A 1.24 x 0.96 cm hypoechoic structure containing echogenic material is observed within the parenchyma. Within the structure, a 0.26 cm focus of mineralization is seen. The prostatic urethra is not overtly dilated.

AGE
5 years
The **left kidney** is normal size (3.54 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. Hyperechoic shadowing diverticular foci are visualized. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

WEIGHT
10 lbs
The **right kidney** is normal in size (3.82 cm in length) with a normal shape, smooth peripheral margins, and normal internal architecture. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis.

Adrenal Glands

The **left adrenal gland** is normal size (0.33 cm at cranial pole) (0.37 cm at caudal pole); 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 (0.59 cm at cranial pole) (0.31 cm at caudal pole) (0.92 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

The **spleen** is normal in size (0.91 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.

Liver

The **liver** is subjectively normal in size with normal contours and structure. There is appropriate echogenicity and echotexture. No overt structural evidence of inflammatory, infiltrative, or regenerative pathology is evident. Vascular and biliary tracts are of normal volume with no evidence of congestion. No pathological hepatic lymphadenopathy observed.

INTERPRETED BY

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

IMAGING PERFORMED BY

Dr. Saum Hadi

HOSPITAL NAME

Bethany Family PC

REFERRING VET

Dr. Saum Hadi

INVOICE

11243

DATE

7.20.22

The **gall bladder** lumen is moderately distended. The wall is thin and smooth. A small amount of aggregated, echogenic debris is adhered to the luminal surface. The cystic and common bile ducts are normal/not seen.

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. There is disruption in the normal 1:3 muscularis: mucosal ratio in some segments. Discreet masses are not identified. The colonic wall is normal. The lumen of the descending colon contains shadowing fecal material. 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

There is no evidence of free fluid. The abdominal **lymph nodes** are normal/not visible.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- The hypoechoic lesion within the prostatic parenchyma is concerning for an abscess or cyst containing echogenic debris. A tumor cannot be excluded but is considered less likely.
- Small, cystic calculus

Secondary Findings

- Minor, age-related renal changes with dystrophic mineralization
- Age-related pancreatic remodeling. Mild pancreatitis is also possible, particularly if the patient exhibits pain on cranial abdominal palpation.
- The small intestinal wall changes are suggestive of an inflammatory bowel process (i.e., inflammatory bowel disease). However, correlation with clinical history is recommended.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Regarding the prostate lesion, consider a fine-needle aspirate (ultrasound-guided) with cytology and aerobic/anaerobic bile cultures. If fluid-filled, the lesion can be drained at the time of aspiration. If ultrasound drainage of the prostatic lesion is not performed, consider referral to a board-certified surgeon to discuss surgical drainage, if indicated. In the meantime, broad-spectrum antibiotic therapy (i.e., fluoroquinolone) is recommended as empirical treatment for prostatic abscessation.

Castration is also recommended, along with a cystotomy and stone removal, with analysis and culture.

If the patient develops chronic and/or intermittent GI signs, further work-up may be warranted and could include the following:

1. Fecal evaluation for ova and Giardia
2. Malabsorption panel, including serum cobalamin and folate, TLI and PLI
3. A resting cortisol level to screen for hypoadrenocorticism. If resting cortisol level is < 2.0 mcg/dl, an ACTH stimulation test is recommended.

4. 6-week limited antigen diet trial
5. +/- endoscopic or surgical gastrointestinal biopsies.



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