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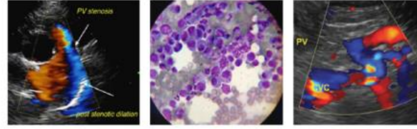
SVS Mobile Imaging CT 262 - 366 - 5970
fredgromalak@gmail.com



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
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PATIENT
Gizmo Torres
20780A

SPECIES
Canine

BREED
Shih Tzu

SEX
Male Intact

AGE
15 years 8 months

WEIGHT
9.1 kg

INTERPRETED BY
R. McKenzie Daniel, DVM, DABVP (Canine and Feline)

IMAGING PERFORMED BY
Tom McNeill

HOSPITAL NAME
SVS Imaging CT

REFERRING VET
Madison VS- Dr. Graham

INVOICE
13895

DATE
5/18/22

PRESENTING CLINICAL SIGNS

Gizmo was presented to the MVS Emergency Service on May 17, 2022, at 7:20pm, for evaluation of inappetence, lethargy and vomiting. Last Saturday, Gizmo vomited yellow, foamy bile three times, stopped eating, and began acting very lethargic. Since then, he has been vomiting between 3-5 times daily, the lethargy and weakness has continued. Yesterday, his vomit was dark brown and he hasn't defecated since Saturday, prompting Gizmo's owner to make an appointment at their pcDVM. While at their pcDVM, they performed bloodwork which showed increased liver and kidney levels (records are attached). Water intake and urination is normal.
Abnormal PE/Chem/CBC/UA Results: Bloodwork results from pDVM from 5/17/22: Alb 2.0 L ALT 718 H ALKP 2046 H GGT 36 H AST 110 H T. bilirubin 7.1 H BUN 72 H Phos 7.2 H Ca 7.7 L Crea 1.4 Precision PSL 37 CBC- normal except mild monocytosis.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, and cystourethral junction exhibited normal thickness and tone. Anechoic urine was present in the lumen with no uroliths or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes was noted.

The prostate was enlarged in size with intact, symmetrical capsule contour. The margins of the gland were intact and able to be differentiated from the surrounding tissue. The prostatic parenchyma was mildly echogenic to heteroechoic without parenchymal mineralization. The prostate measured 3.5 cm x 2.5 cm. Anechoic, thinly walled parenchyma cysts were present.

Several mildly prominent medial iliac lymph nodes were present. These lymph nodes were homogenous, mildly hypoechoic and smoothly marginated. A normal width: length ratio was maintained (<0.5). Evidence of perilymphatic inflammation was evident. An example of a medial iliac lymph node measured 0.89 cm in diameter.

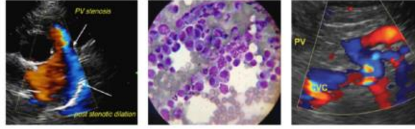
Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and mild to moderate loss of corticomedullary symmetry and definition expected for the age of the patient. Mild pyelectasia was present in both kidneys. The left kidney measured 4.8 cm in length. The right kidney measured 4.2 cm in length.

Adrenal Glands

The bilateral adrenal glands were normal in size. Mild parenchyma heterogeneity and mild capsule asymmetry was present without suspicion for overt neoplasia. The left adrenal gland measured 0.59 cm width in the cranial pole and 0.53 cm width in the caudal pole. The right adrenal gland measured 0.61 cm width in the cranial pole and 0.39 cm width in the caudal pole.

Spleen

The spleen exhibited potential for mild enlargement with subtle areas of capsule asymmetry primarily in the caudal and medial spleen. Intermittent, variably echogenic splenic nodules were present, along



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with ill-defined hypoechoic caudal splenic parenchyma in the area of the splenic tail. An example of a splenic nodule measured 0.68 cm In diameter. The ill-defined hypoechoic splenic parenchyma in the area of the splenic tail measured approximately 1.6 cm in diameter.

Liver/ Gallbladder

The liver was enlarged to swollen in size. The hepatic parenchyma revealed decreased echogenicity compared to the spleen and renal cortical parenchyma with a moderate coarse echotexture. Increased prominence of the portal vascular borders was evident. The capsule of the liver was normal in margination. Distinct masses or nodules were not evident. The gallbladder was non-distended in size with mildly prominent to echogenic gallbladder walls. The gallbladder contained anechoic content with no evidence of sludge. The common bile duct was normal.

Gastrointestinal

The stomach presented mild wall thickening secondary to mild echogenic mucosa hypertrophy. Intact wall layering was maintained and distinct. The stomach was empty. The stomach wall width measured 0.36 cm.

The intestinal walls demonstrated intact wall layering and maintained 1:3 muscularis / mucosa ratio. The mucosa exhibited mild decreased echogenicity with occasional mucosal speckling. A segmental to diffuse ileus pattern consisting of mild fluid accumulation in the intestinal lumen was present without obstruction or foreign material. The duodenum wall width measured 0.43 cm.

Normal visible colon wall layers were present with apparent formed feces in lumen.

Pancreas

The left limb, right limb, and base of the pancreas presented hypoechoic to nonhomogeneous echogenicity compared to adjacent omental fat. Mild asymmetrical capsule margination was present with mild variable parenchymal swelling and mild peripancreatic reactivity / inflammation. Intermittent cysts were present in pancreas. No overt evidence of neoplasia.

Free Abdomen

Multiple cranial abdominal (hepatic, gastric likely) lymph nodes were present. The lymph nodes exhibited symmetrical to rounded margination with abnormal width: length ratio (>0.5). The enlarged lymph nodes were bordered by echogenic to reactive mesentery. A cranial abdominal lymph node measured 2.0 cm x 1.5 cm.

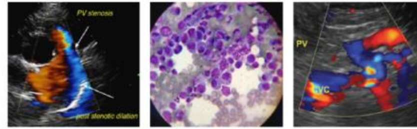
Both testicles exhibited nonspecific nodules. An example of a left testicle nodule measured 1.7 cm in diameter. An example of a right testicle nodule measured 0.82 cm In diameter.

Small pockets of scant peritoneal free fluid and generalized reactive mesentery were present.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Nonhomogeneous to cystic prostate - BPH with parenchymal cysts - potential for prostatitis, neoplastic criteria Is considered unlikely



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- Variably echogenic splenic nodules with ill-defined hypoechoic caudal splenic parenchyma - suspect caudal splenic infarction with potential for areas of hyperplasia, hematopoiesis, small hematomas, granulomas, or neoplasia
- Hypoechoic to swollen liver - sonographically consistent with acute hepatopathy, vacuolar hepatopathy, acute hepatitis (viral, bacterial, Leptospirosis, toxin, etc.,) hepatic congestion, no evidence of hepatic vascular congestion (occult neoplasia possible)
- Nondistended gallbladder with mildly prominent to echogenic walls - possible inflammation
- Acute to acute on chronic pancreatitis- potential for pancreatic edema
- Acute gastroenteritis pattern
- Hypoechoic to swollen cranial abdominal lymphadenopathy with minor medial iliac lymphadenopathy - reactive, inflammatory criteria with suspicion for cranial abdominal neoplastic lymphatic criteria
- Scant peritoneal free fluid and mild generalized reactive mesentery

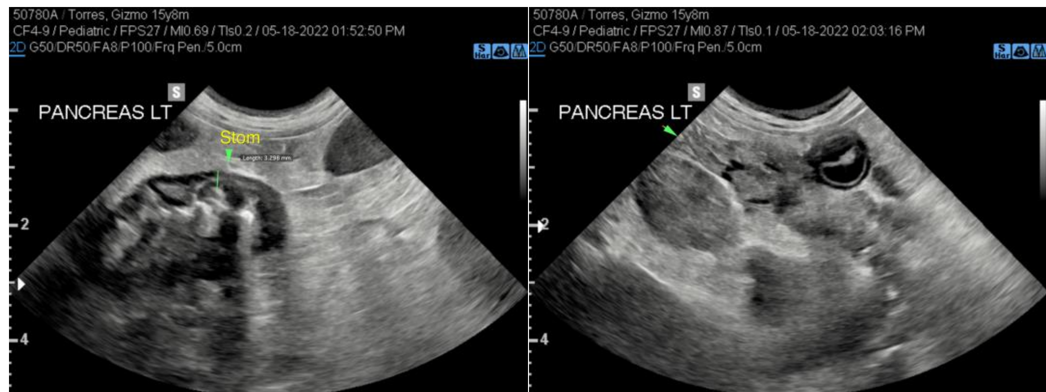
Secondary Findings

- Chronic renal changes with minor pyelectasia
- Bilateral nodular testes

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Assuming normal clotting status, ultrasound-guided hepatosplenic FNA, as well as enlarged cranial abdominal lymph node FNA, if accessible, is recommended for screening cytology.

Primary concern for occult hepato-lymphatic neoplasia is warranted yet not definitive. Sampling is considered essential for further assessment. Empirical therapy for acute hepatopathy, pancreatitis, and acute gastroenteritis, pending additional diagnostics, would be reasonable.



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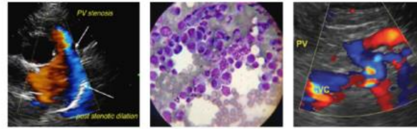

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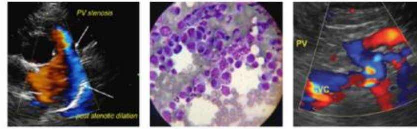

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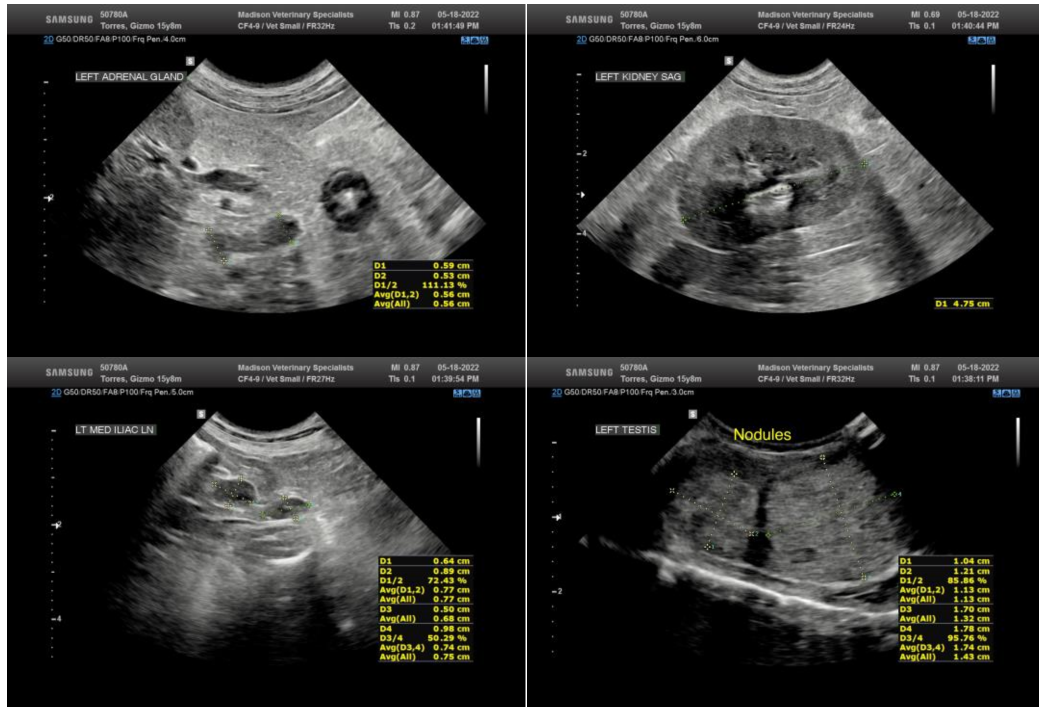

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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