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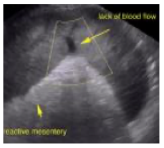
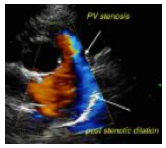
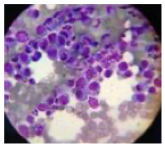
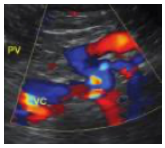
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

SonoPath.com
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PATIENT
Caymus Serrano

SPECIES
Canine

BREED
Bernese Mt Mix

SEX
Intact Male

AGE
9 years

WEIGHT
63.4 lbs

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

IMAGING PERFORMED BY
Dr. G. Ferrer, DVM

HOSPITAL NAME
Paseos VC

REFERRING VET
Dr. Vientos, DVM

INVOICE
11671

DATE
9.21.22

PRESENTING CLINICAL SIGNS

History: Presented as a referral from the Emergency clinic for an abdominal ultrasound. Pt has history of vomiting and diarrhea at the EC. The vomits may have blood. Not more history was provided.

Abnormal PE/Chem/CBC/UA Results: Lab-work 9/20/22: CBC: EOS- 2.05 K/uL (0.06-1.23) BASO- 0.14 K/uL (0.00-0.10) CHEM: BUN- 6mg/dL (7-27)

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The **urinary bladder** is mildly to moderately distended. The wall in the region of the apex is thickened (up to 0.57 cm) with an irregular mucosal surface. The wall tapers to a normal thickness as it extends towards the cystourethral junction. A scant amount of echogenic debris is observed within the lumen. No cystic calculi are seen. The region of the trigone and the visible portion of the proximal urethra are normal.

The **prostate** is enlarged (4.72 cm in width) with a slightly irregular shape. Parenchyma is hyperechoic relative to surrounding omental fat and heterogenous in appearance, with numerous, small, ill-defined cystic areas throughout the gland. The prostatic urethra is not overtly dilated.

The **left kidney** is normal size (7.41 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with moderate loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

The **right kidney** is normal size (8.22 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild to moderate loss of corticomedullary distinction. A few cortical cysts are seen. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

Adrenal Glands

The **left adrenal gland** is normal size (0.68 cm at cranial pole) (0.76 cm at caudal pole) (2.48 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 (0.73 cm at cranial pole) (0.62 cm at caudal pole) (3.00 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 (2.21 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. A 1.23 cm hypoechoic to slightly heterogenous nodule is observed at the cranial aspect. 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.

The **gall bladder** lumen is moderately distended. The wall is thin and smooth. Luminal contents are anechoic. 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. Discreet masses are not identified. The ileocecocolic junction and colonic wall are normal. There is no evidence of an obstructive pattern.

Pancreas

The region of the **pancreas** is isoechoic relative to surrounding omental fat. No obvious parenchymal abnormalities are observed. There is no evidence of regional inflammation or effusion.

Free Abdomen

There is no obvious evidence of free fluid. The medial iliac **lymph nodes** are visualized, the largest measuring 2.45 cm in width. A few prominent mesenteric lymph nodes are also seen, the largest measuring 2.45 cm in length.

Other

The left testicle measures 2.14 x 1.97 cm and is subjectively small in size, with an irregular shape. A 1.73 x 1.45 cm hypoechoic to mildly heterogenous nodule is observed, within the parenchyma. One still image of the right testicle is available for interpretation. The right testicle measure 3.31 x 1.35 cm and is subjectively normal in size with homogenous parenchyma.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- An obvious cause for the patient's gastrointestinal signs is not identified in this study. Considerations include primary gastrointestinal disease (i.e., dietary indiscretion, infectious/parasitic disease, acute hemorrhagic gastroenteritis, inflammatory bowel disease), underlying metabolic issue (i.e., hypoadrenocorticism), other.

- The splenic nodule could be consistent with an emerging tumor or a focus of lymphoid hyperplasia, extramedullary hematopoiesis, or similar.

Secondary Findings

- The prostate changes are consistent with benign prostatic hyperplasia with parenchymal cysts. Concurrent bacterial prostatitis is also possible, particularly if the patient is exhibiting lower urinary tract signs. Correlation with the patient's urinalysis findings is recommended.

- The urinary bladder wall changes are suggestive of cystitis.

- The left testicular nodule could be consistent with a tumor or focal age-related remodeling

- The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Regarding the gastrointestinal signs, consider the following:

1. A fecal evaluation for ova and Giardia is recommended

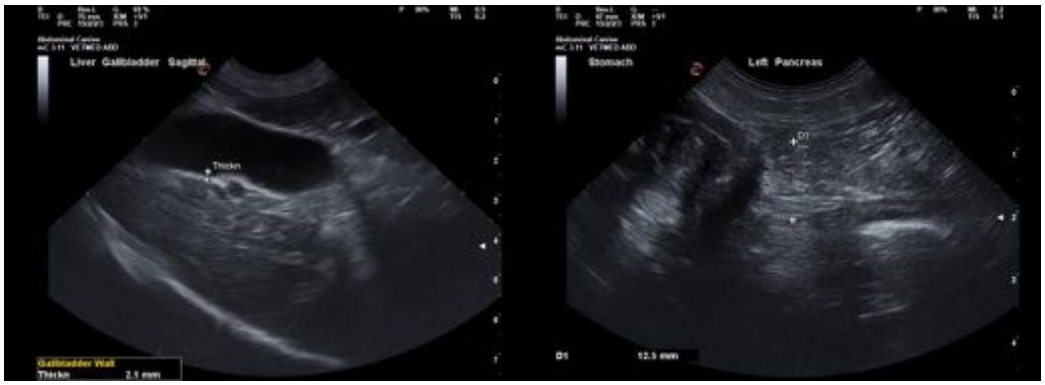
2. Prophylactic deworming with Fenbendazole is also recommended.
3. Consider initiation of a probiotic (i.e., Proviable Forte or Visbiome)
4. Also consider supplementation with fiber (i.e., Metamusil or Konsyl)
5. Supportive care for acute gastroenteritis (i.e., fluid therapy, antiemetics, gastric protectants, and pain medications (as needed) is recommended.

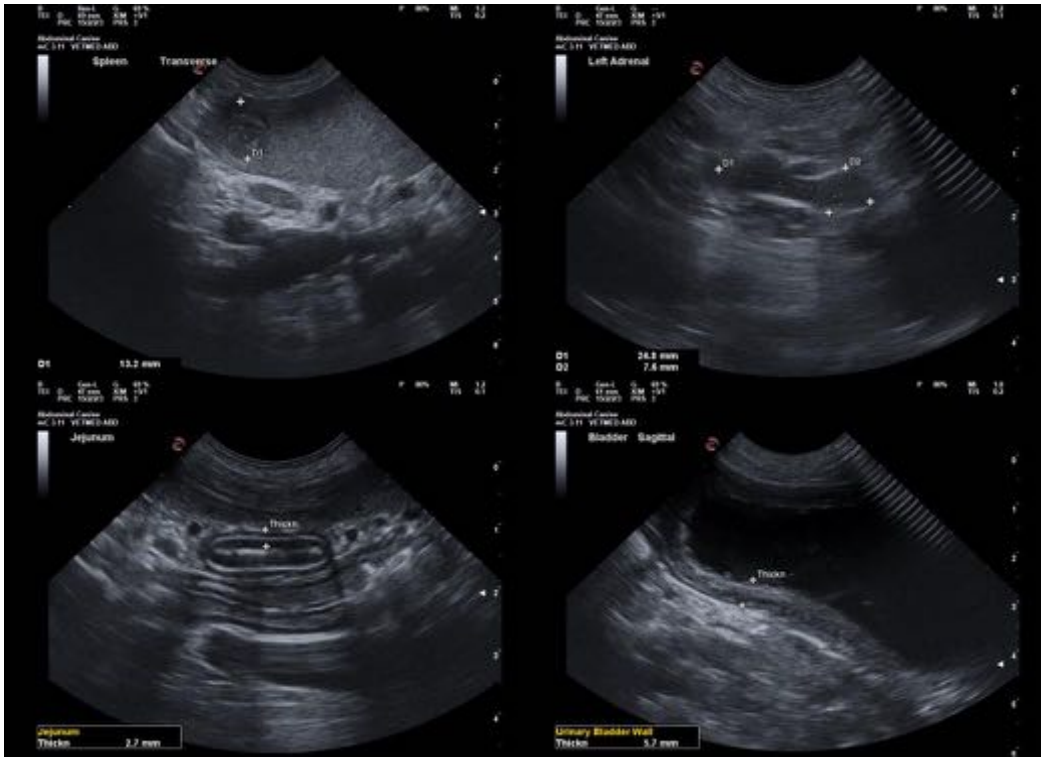
A more advanced GI work-up could include the following:

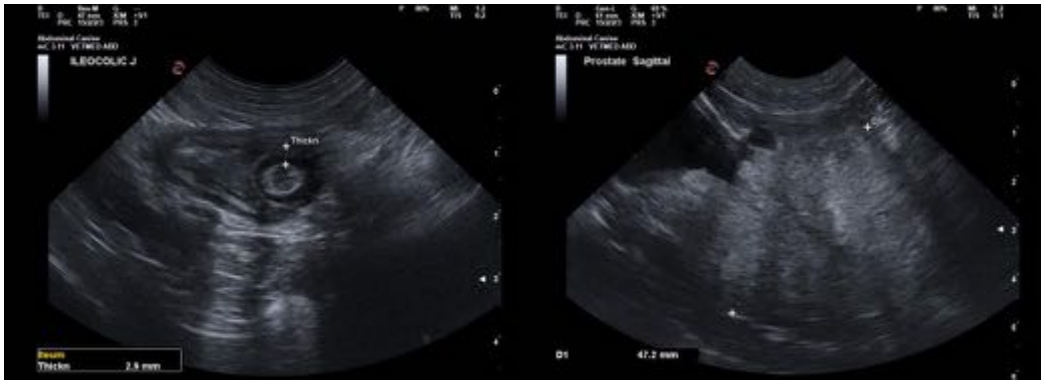
1. Resting cortisol level to screen for hypoadrenocorticism
2. Malabsorption panel including serum cobalamin and folate, TLI and PLI
3. GI biopsies (i.e., endoscopic or surgical)

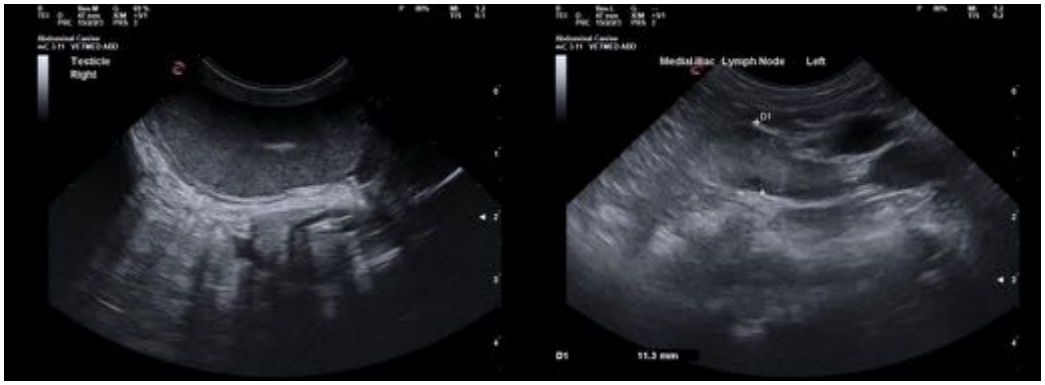
Given the prostate changes, consider a urinalysis with culture and sensitivity and castration, when the patient is stabilized. Given the left testicular nodule, the testicle should be submitted for histopathology if castration is pursued.

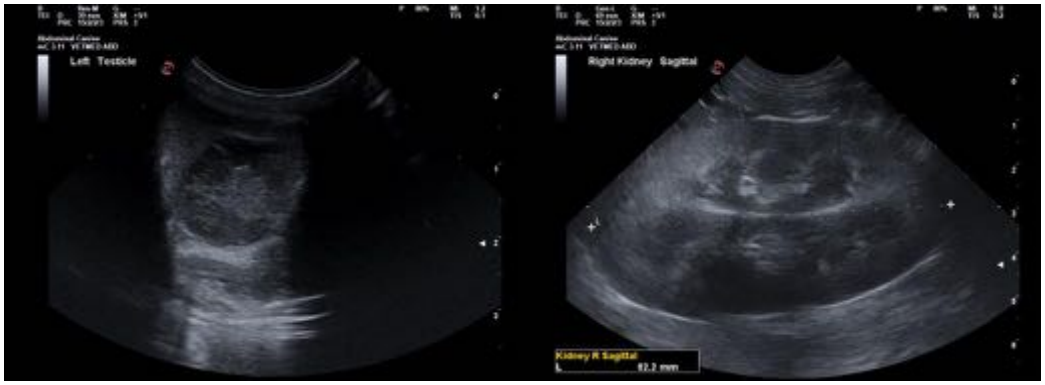
Regarding the splenic nodule, a fine-needle aspirate is recommended if clotting status is appropriate.




Spleen Transverse
D1 13.2 mm
Left Adrenal
D1 26.8 mm
D2 7.6 mm
Jejunum
Thickn
Jejunum
Thickn 2.7 mm
Bladder Sagittal
Thickn
Urinary Bladder Wall
Thickn 5.7 mm


ILEOCOLIC J
Thickn
Ileum
Thickn 2.9 mm
Prostate Sagittal
D1 47.2 mm


Testicle
Right
Medial Iliac Lymph Node Left
D1
D1 11.3 mm



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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