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Clinical Sonography & Telecytology
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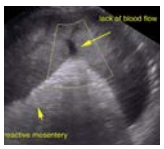
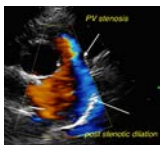
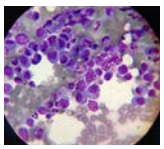
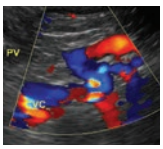

SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT

Morita Rosado Munoz

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

10 Years

WEIGHT

7

INTERPRETED BY

Jessica Midence, DVM, DACVIM (SAIM)

IMAGING PERFORMED BY

Dr. Gabriel Ferrer

HOSPITAL NAME

Pulse: Pet Ultrasound

REFERRING VET

Dr. Alma Alicea

INVOICE

45832

DATE

3/10/23

PRESENTING CLINICAL SIGNS

Presented to the EC on 2/26 with hx of fever, lethargy, anorexia. Indoor cat, vaccines UTD, no hx fleas per owner. She was placed on IV fluids, omeprazole, clavamox, her appetite improved, fever resolved and was sent home with recheck 10 days. She returned to the EC on 3/6 with recurrence of decreased appetite, lethargy and now had mild nausea. Temp 102.9 (fever returned). Recheck cbc hct decreased to 23%, non reg. Chem mild hypercalcemia 11.4, globulins mildly increased 6.0, TP 9.0. Lipase mildly elevated 1612 amylase 2497 but cat was not fasted. Alt 162. creat 1.3. BUN 12. phos 4.3. Thoracic rads unremarkable. d/c clavamox start doxycycline 10mg/kg po sid, continue mirtazapine, add mirtazapine. 3/9 - vomited twice. Appetite had improved on3/7 and 3/8, but then vomited twice. temp 101. Recheck labs - CBC - hct worse 20.3%, non-regenerative. PLT 81K. WBC wnl, mild lymphopenia. Chem calcium higher 12.4, globulins 5.9. t. bili 1.0. Elevated Lipase/amylase, not sure if fasted at presentation. Abdominal US scheduled for today. Cat was started on fluids again, metronidazole, cerenia, protonix, continue doxycycline and Dex Sp was started yesterday at 1mg/kg IV once. Plan for today - 1. Abd. US. 2. UA. 3. SDMA. 4. FNAs of spleen done and submitted to idexx for cytology. Decide next step pending US report.

Abnormal PE/Chem/CBC/UA Results: BW on 2/26/23 CBC unremarkable. chem unremarkable. FIV/FeLV neg, Idexx Fever unknown origin PCR negative.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder mucosa, trigone, and visible urethra are normal in thickness and there is no evidence of mucosal irregularities. The bladder lumen is distended with anechoic urine and bladder thickness is considered normal for volume of urine. No masses, inflammatory changes or calculi are observed. A scant amount of suspended echogenic debris is observed within the lumen, consistent with lipid droplets within the urine.

The left kidney is normal in size (4.0 cm). It has normal architecture and overall shape, though there is a somewhat undulating margin, consistent with prior renal infarct. Slightly decreased corticomedullary definition. There is no evidence of pyelectasia, nephroliths or hydroureter.

The right kidney is normal in size (4.3 cm). It has normal architecture and overall shape, though there is a somewhat undulating margin, consistent with prior renal infarct. Slightly decreased corticomedullary definition. There is no evidence of pyelectasia, nephroliths or hydroureter.

Adrenal Glands

The left adrenal gland is normal in size (0.29 cm at the caudal pole, 0.28 cm at the cranial pole). The left adrenal gland has normal shape and it is normal in appearance and echogenicity.

The right adrenal gland is normal in size (0.32 cm at the caudal pole and 0.21 cm at the cranial pole). The right adrenal gland has normal shape and it is normal in appearance and echogenicity.

Spleen

The splenic echotexture is homogeneous with parenchyma isoechoic to liver and hypoechoic to the renal cortical parenchyma. The spleen measures mildly thick at 1.2 cm. The capsule is undulating. The parenchyma of the spleen does seem to bulge the contour. At the tail of the spleen, there is a nodule that bulges the capsule, rounding the edges of the tail of the spleen. This nodule measures 1.2 cm x 1.3 cm roughly, though the borders are indistinct. There is also an indistinct nodule that bulges the contour in the mid body of the spleen. The splenic vasculature is normal without signs of congestion or thrombosis.

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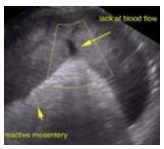
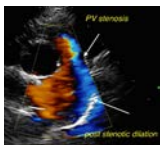
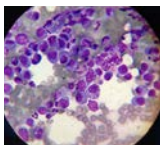
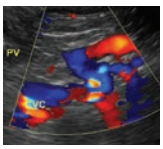

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Liver

The liver is subjectively enlarged with rounded contours. Normal structure with smooth peripheral margins. The echogenicity is hyperechoic with decreased portal markings. The visible portions of the vasculature and biliary tract appear normal. No pathological hepatic lymphadenopathy observed.

The gallbladder lumen is mildly distended with anechoic bile. The wall is a normal thickness (0.96 cm) and smooth. Luminal contents are anechoic. The cystic and common bile ducts are a bit tortuous and dilated, which can be clinically insignificant in older cats. There is no inflammation associated with this.

Gastrointestinal

The gastric lumen contained a minimal amount of ingesta. The stomach wall is of normal wall thickness (0.18 cm) with some variability due to rugal folds. There is normal gastric wall layering. There are no masses or focal lesions observed and the pyloric outflow tract appears patent.

The visualized areas of duodenum, jejunum and ileum appear diffusely mildly thick. The duodenum measures 0.25 cm, which is at the upper limit of normal. The jejunum measures in certain areas up to 0.285 cm, which is mildly thick. The muscularis layer of the jejunum was subjectively thickened. The ileum measures at the upper limit of normal at 0.32 cm. Distinct wall layering noted throughout. There was a small amount of ingesta in some loops of bowel, consistent with possibly unfasted state of the patient.

The ileocolic junction was visualized and had normal intact wall layering and is subjectively mildly thick, measuring at the upper limit of normal.

Sections of colon are visualized with formed fecal material and gas shadowing distally. The colon measures normal at 0.13 cm. There is no observed focal or generalized colon wall thickening or loss of layering.

Pancreas

The area of the pancreas is normal and isoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid. The visible pancreatic duct was normal.

Free Abdomen

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The omentum is of normal uniform echogenicity.

PRIMARY FINDINGS

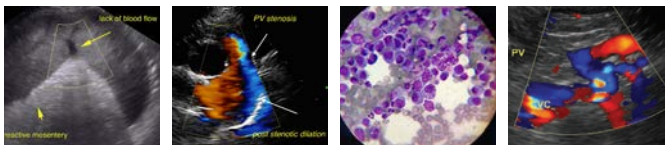
- Splenomegaly with undulating capsule and nodules that deform the capsule
- Hyperechoic hepatomegaly

SECONDARY FINDINGS

- Thickened small intestines
- Chronic degenerative renal changes

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

While the spleen is very abnormal and concerning, the cause of the fever and clinical signs is not overtly obvious from this sonographic examination. The appearance of the spleen is abnormal, as the parenchyma bulges the contour, creating an undulating surface, and there are two nodules that also



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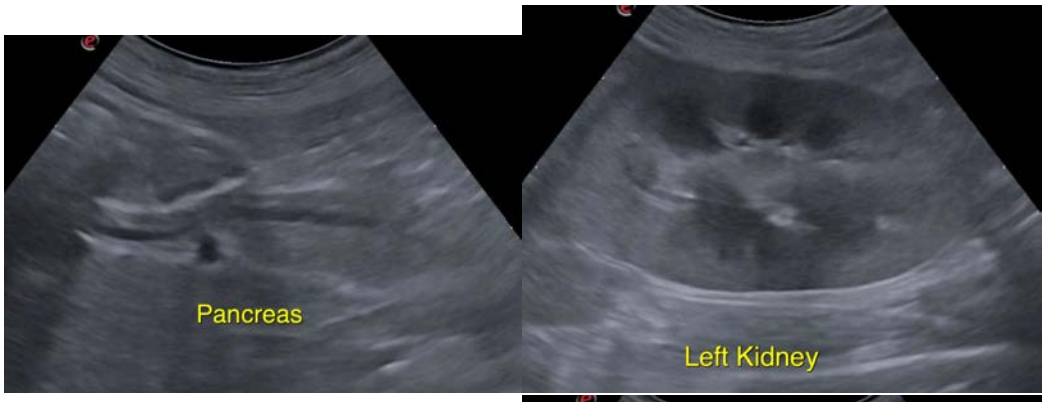
deform the capsule of the spleen and create a bulged contour. These changes could be consistent with reactive lymphoid hyperplasia or extramedullary hematopoiesis, but infiltrative neoplasia such as mast cell tumor or lymphoma are concerns as well and cannot be ruled out based on sonography alone. Correlate with results of cytology.

The liver is enlarged and hyperechoic, which could be consistent with mild hepatic lipidosis or reactive hepatopathy, but could also be consistent with infiltrative neoplasia. Consider coagulation testing, ammonia testing, and fine needle aspirate if the patient fails to response to ongoing medical management.

Most causes of fever of unknown origin in cats (particularly indoor only cats) are viral/infectious, such as herpes virus or Calicivirus. Consider serology testing for toxoplasmosis (rather than PCR testing) and ongoing supportive care for fever, anorexia, and nausea. Consider antiviral therapy such as famciclovir if it is not contraindicated in this patient. The anemia may be secondary to chronic inflammatory disease, IV fluid therapy, and venipuncture, given there are no obvious causes of anemia on this exam. Ongoing treatment with a tapering course of steroids is not unreasonable, given that splenic aspirates were already performed.



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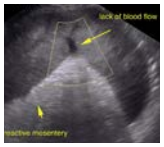
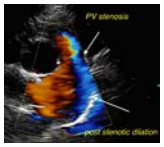
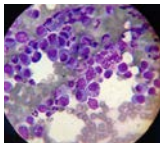
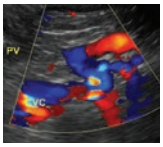

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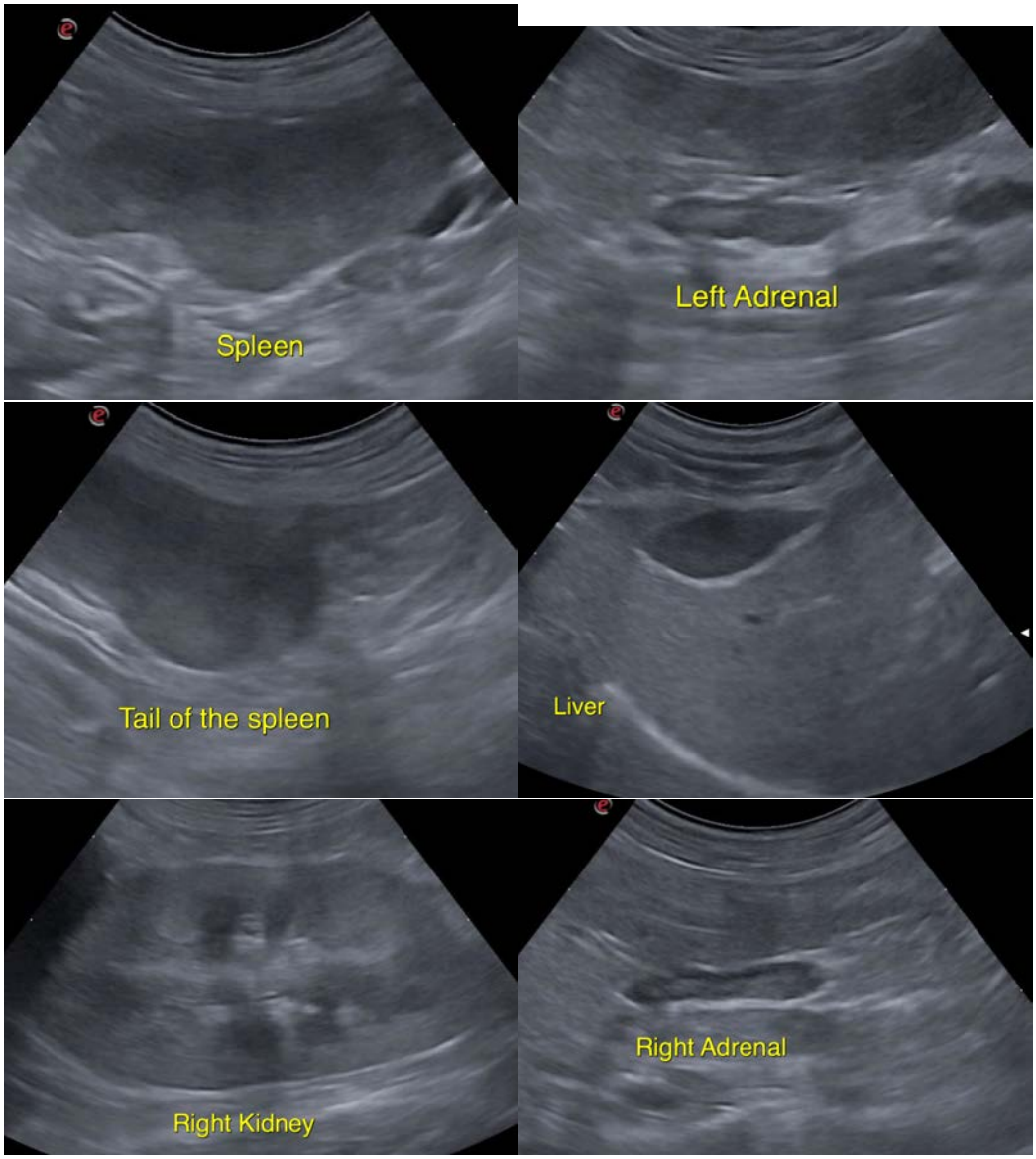

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Jessica Midence, DVM, DACVIM (SAIM)

info@SonoPath.com