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Clinical Sonography & Telecytology
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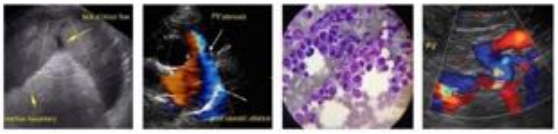


THE FOCAL ZONE
IMAGING PERFORMED BY
289-808-2608 info@thefocalzone.com

PATIENT

Betty Freeland

SPECIES

Canine

BREED

Rhodesian Ridgback

SEX

Spayed Female

AGE

11 years

WEIGHT

26 kg

INTERPRETED BY

Tam Mengine, DVM, DABVP (canine/feline practice)

IMAGING PERFORMED BY

Crystal Hill

HOSPITAL NAME

Beatties East Hamilton PH

REFERRING VET

MacDonald

INVOICE

12633

DATE

4.3.23

PRESENTING CLINICAL SIGNS

History: USG greater than 1.050 with some blood present. Consistent blood in urine over the last several months. Rads done this January were unremarkable. Has been on Apoquel and no other meds. We are a second opinion as owner reports that she has noticed blood in urine for about 1 year.

Abnormal PE/Chem/CBC/UA Results: U/A free catch, dark yellow, pH 7, Blood 2+, Urobilinogen 2+, RBCs 8/hpf, WBCs less than 1/hpf, no bacteria. Sp Grav - 1.050

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is mildly distended with anechoic urine, and luminal sediment is not present. The bladder wall is diffusely thickened and there are irregularities to the mucosal surface. The ureteral papillae, trigone and pelvic urethra are of normal appearance, and the ureters are not visible (normal). No masses or calculi are noted. Urethra visualized to 3.0 cm.

The kidneys are of normal size and shape and exhibit appropriate corticomedullary differentiation with a normal 1:3 cortex to medulla ratio. There is no evidence of nephrolithiasis, mineralization, pyelectasia, cystic change or hydronephrosis. The proximal ureter is not visible (normal). The left kidney is 5.8 cm in length. The right kidney is 6.6 cm in length.

Adrenal Glands

The adrenal glands are both identified in their normal locations. They are normal in size and shape with appropriate parenchymal echogenicity and normal phrenic vasculature. The left adrenal gland height is 6.0 mm at the cranial pole and 7.0 mm at the caudal pole. The right adrenal gland height is 9.0 mm at the cranial pole and 6.6 mm at the caudal pole.

Spleen

The splenic parenchyma is diffusely mottled with small hypoechoic nodules up to 7.0 mm in size. The splenic vasculature is normal with no evidence of congestion or thrombosis, and blood flow through the splenic hilus appears normal.

Liver

The liver is of appropriate size and shape, with sharp borders and a mildly coarse parenchymal echotexture that is hypoechoic to the spleen. The portal and hepatic vasculature are of normal size and appearance with no evidence of congestion or thrombosis.

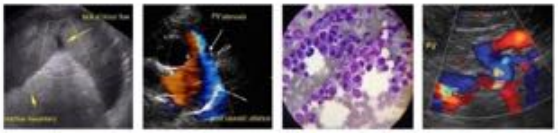
The gallbladder is moderately distended with anechoic contents. The wall was thin and continuous with no focal lesions. The cystic and common bile ducts are normal / not visible.

Gastrointestinal

The stomach is moderately distended with normal ingesta. The gastric wall is 4.1 mm with normal deviations due to rugal folds and exhibits appropriate wall layering. The pylorus is of normal appearance.

The visualized portions of the duodenum, jejunum, and ileum are of normal thickness with intact wall layering that exhibits the appropriate 1:3 muscularis to mucosa ratio. The duodenal wall measures 3.7 mm. The jejunal wall measures up to 2.9 mm. Intestinal motility appears normal.

The visible portions of the colon are of normal thickness, up to 1.2 mm, with intact wall layering. The ileocecal junction is visualized and appears normal.



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Pancreas

The areas of the limbs and body of the pancreas are isoechoic to the surrounding mesenteric fat, with normal capsular appearance. There is no evidence of peripancreatic inflammation. The pancreatic duct appears normal.

Free Abdomen

There is no evidence of free fluid within the peritoneal cavity. The omentum and intra-abdominal fat are of appropriate echogenicity. Enlarged abdominal lymph nodes are not observed. The aortic trifurcation has normal blood flow with no evidence of thrombosis.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Diffusely mildly thickened and irregular bladder wall, consistent with cystitis

Secondary Findings

- Diffusely mottled spleen

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The changes in the bladder wall are suggestive of bacterial cystitis. Given the chronic history, a urine culture with sensitivity is recommended. If hematuria persists despite appropriate therapy, or if the urine culture is negative, then referral for cystoscopy or a urine BRAF test could be considered to rule out neoplasia. However, this is considered unlikely given the length of the history and he mild nature of the changes seen.

The splenic changes are non-specific and could be consistent with nodular hyperplasia, extramedullary hematopoiesis, splenitis or less likely, neoplasia. Recommendations include:

- Ultrasound-guided fine needle aspiration of affected areas with a 25G needle
- If splenitis is suspected, then infectious disease testing, such as the Canine Comprehensive panel from NCSU would be recommended: https://cvm.ncsu.edu/research/labs/clinical-sciences/vector-borne-disease/

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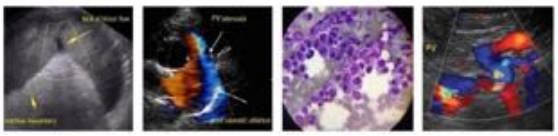

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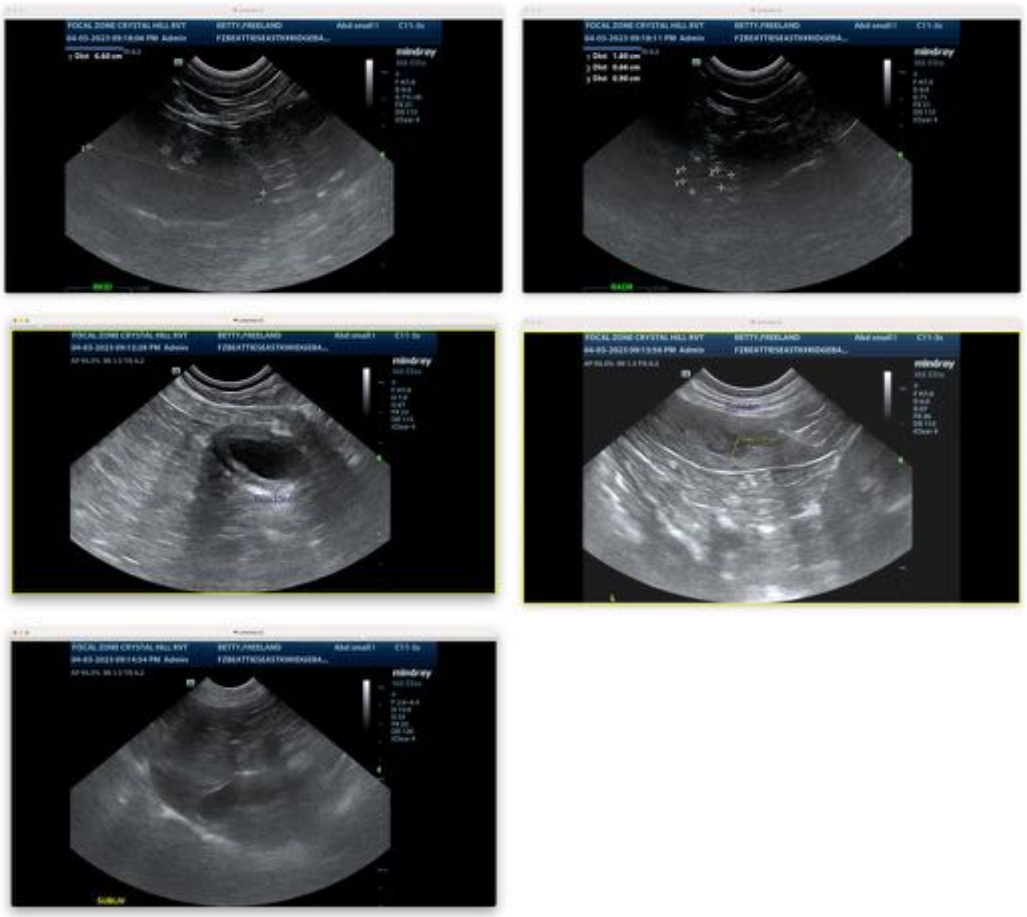

The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.
Tam Mengine, DVM, DABVP (canine/feline practice) info@SonoPath.com