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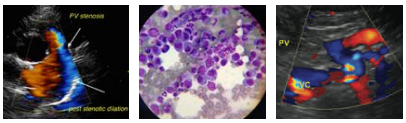

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DATE
12/1/21

PATIENT
Oslo Abbott

SPECIES
Canine

BREED
Pitbull Terrier

SEX
Neutered male

AGE
2/20/10

WEIGHT
85 lbs

INTERPRETED BY
Kathleen Sennello DVM, MS, Diplomate ACVIM (Small Animal Internal Medicine)

IMAGING PERFORMED BY
Rachel Brilhart RDMS

HOSPITAL NAME
Banfield Pet Hospital of Westminster

REFERRING VET
Dr. Stephens

INVOICE
94260

PRESENTING CLINICAL SIGNS

History: (10/23/21) Oslo, 11y/7m, MN Pit Bull presents for urinary concerns, due for comprehensive exam - drinking and urinating frequently about 2 weeks, O was not concerned until she started seeing blood. O brought urine sample, free catch from this morning. Last night 6p, P urinated blood on kitchen floor. P had to go out very frequently overnight. P seems a little tired today since he didn't sleep last night but is otherwise happy and energetic. P has been drinking water from the lake, O unsure if this contributing to the urinary issue; e/d normally, no GI concerns. P is scheduled for dental on 10/15. PE - nuclear sclerosis OU, mild dental discoloration, ABD: soft and comfortable on palpation, no palpable abnormalities, GI/UG: NSF, LN: no palpable enlargements. (11/22/21) Oslo, an 11 yr/9-month-old MN Pitbull, presents for urinary follow-up DROP OFF. Still drinking and urinating a lot. Finished Baytril pills Saturday. PE - nuclear sclerosis ou, mild dental discoloration, abd: soft and comfortable on palpation, no palpable abnormalities, gi/ug: nsf, ln: no palpable enlargements rectal: prostate is palpable (smooth/non-painful).
Current Medications: (10/11/21) Amoxicillin (500 mg): Give 2 capsules PO BID x 14 days. (10/29/21) Enrofloxacin 136 tablets: 1.5-tab sid po x 14 days; Galliprant 60 mg 1.5 tab PO SID x 5 days for pain/inflammation
Lab Results: (10/11/21) UA: RBC, 5+ rods on sediment, SG 1.006, pH 6. (10/15/21) CBC/chem/Lytes: LYM L, ALKP H (570) - NEW ELEVATION, ALT H (316 (prev 124), CHOL H (364), GGT H (16). Urine culture MIC: e.coli. (11/22/21) UA, free catch: very pale yellow, clear, SG 1.004, trace protein. pH 6, inactive sediment
Radiographs: 10/29/21 bladder ultrasound inhouse with Dr Jantz- bladder moderately distended with urine, thickened bladder wall, no stones or masses seen, pet urinated during ultrasound, bloody urine noted
Date of Previous IntraPet Ultrasound: No previous IntraPet scans.
Sedation: Declined. Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

The prostate is borderline large in size and measured 2.1 cm in diameter in the sagittal view, but it has irregular shape with smooth external margins. The parenchyma is homogenous with no discrete focal lesions. The prostatic urethra appears normal with no evidence of irregularity, invasion, mass effect or calculi.

The left kidney has a normal shape and size (8.28 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (8.53 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. Mild pyelectasia was noted at 0.21 cm. There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal/borderline enlarged at 1.0 cm in size measuring cm at the caudal pole It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

The right adrenal gland is normal /borderline enlarged in size measuring 0.88 cm at the caudal pole It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

Spleen

The spleen is subjectively normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

Liver

The liver is subjectively large in size, and echogenicity with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed. The gallbladder lumen is moderately distended. The wall of the gallbladder is not thickened and has a smooth mucosal surface. There is a moderate amount of non-organized echogenic debris. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach is moderately dilated with fluid and irregular shadowing material most consistent with moderate ingesta and gas. It measures at a normal thickness of <0.7cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layering is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. The duodenum measured as normal (between 0.3-0.5cm in wall thickness) and the jejunum measured as normal (between 0.2-0.47cm.) Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

Pancreas

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.

Free Abdomen

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

ULTRASONOGRAPHIC FINDINGS

PRIMARY FINDINGS:

- Large, heterogenous liver. The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

- Moderate gallbladder sludge. The significance of the aggregated gallbladder debris is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting.

SECONDARY FINDINGS:

- Prominent prostate with smooth external margins. This prostate is large for a dog neutered prior to puberty, but could be normal for a dog neutered later in life.

- Borderline bilateral adrenomegaly. The bilateral adrenomegaly could be consistent with bilateral hyperplasia (e.g., secondary to pituitary-dependent hyperadrenocorticism), bilateral infiltrative neoplasia, inflammatory adrenal disease, other. Correlation with clinical findings is recommended.

- Moderate shadowing material in the gastric lumen. The findings are most consistent with ingesta. Correlate with feeding history.

- Mild, right sided pyelectasia. Pyelectasia of the right kidney could be consistent with pyelonephritis, chronic renal disease, secondary to PU/PD or fluid therapy (if applicable), other.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No focal lesions are observed in the lower urinary tract to explain the blood in the urine. Hopefully this is secondary to the E Coli cystitis. I recommend reculture a week after cessation of antibiotics to ensure that the infection has cleared. The prostate appears enlarged in this patient, but the history reports that the patient was neutered in life, so this may be normal for this individual. If lower urinary tract signs persist despite appropriate treatment of the cystitis you can consider further evaluation for underlying prostatic neoplasia (FNA of the prostate), but this seems unlikely.

The liver is large and heterogenous and the adrenal glands are plump. This could be consistent with Cushing's disease or primary hepatopathy.

- Consider close evaluation of history for possible toxic changes examine medications, diet, dietary indiscretion etc...
- Consider PCR on urine/serum for leptospirosis (if not on antibiotics)/serology if recent antibiotic history
- If not already done, consider pre and post prandial bile acids to evaluate liver function
- If the ALP is significantly elevated relative to the ALT and symptoms consistent with Cushing's are present, consider adrenal function testing (ACTH stim)
- Consider Fine needle aspirate if round cell neoplasia is on your differentia list (25 g needle, normal coags)
- If no response to supportive care (Denamarin, +/- antibiotics,+/- Ursodiol etc.) consider liver biopsy with samples obtained for histopathology, culture, and copper levels.


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oslo,abbott
Abd small I
C11-3s
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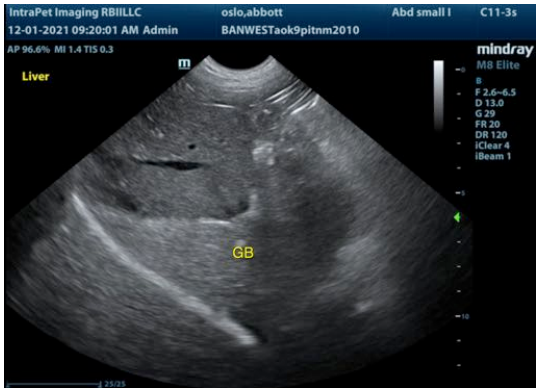
AP 96.6% MI 1.3 TIS 0.3
mindray
M8 Elite
Liver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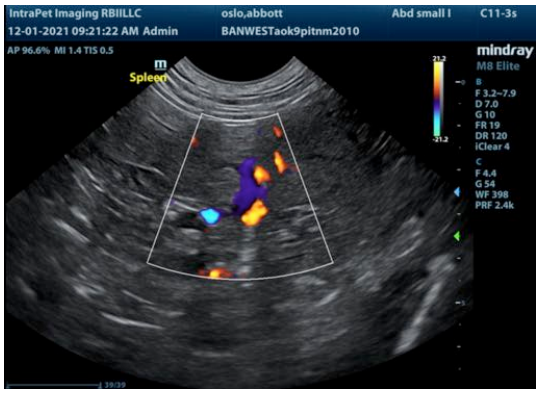
Stomach
INGESTA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mindray
M8 Elite
Spleen


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12-01-2021 09:22:00 AM Admin
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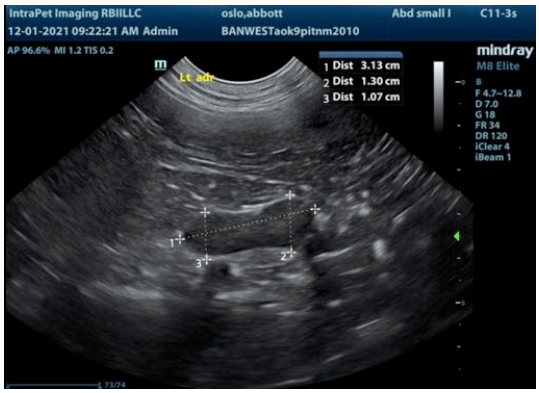
AP 96.6% MI 1.4 TIS 0.3
mindray
M8 Elite
Lt Kidney
1 Dist 8.28 cm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Abd small I
C11-3s
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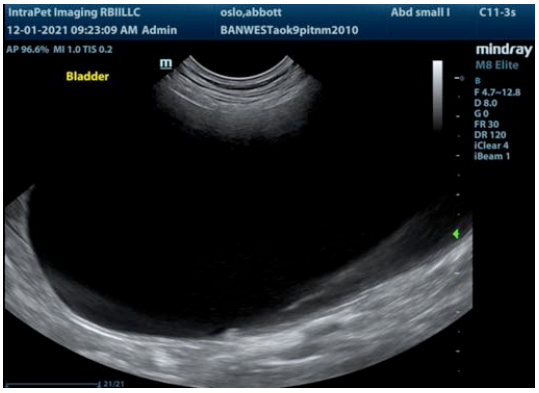
BANWESTaok9pitnm2010
AP 96.6% MI 1.2 TIS 0.2
mindray
M8 Elite
Lt adr
1 Dist 3.13 cm
2 Dist 1.30 cm
3 Dist 1.07 cm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oslo,abbott
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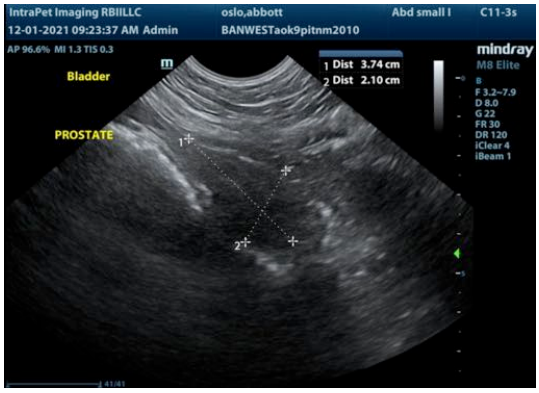
BANWESTaok9pitnm2010
AP 96.6% MI 1.0 TIS 0.2
mindray
M8 Elite
Bladder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Abd small I
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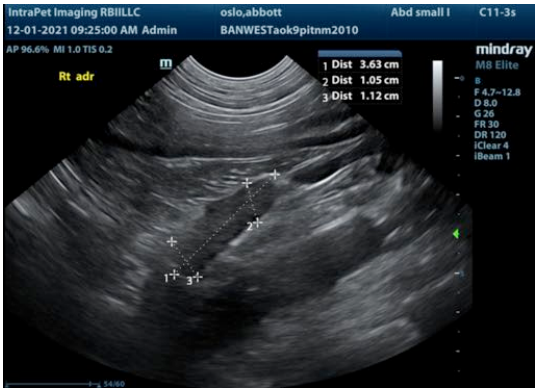
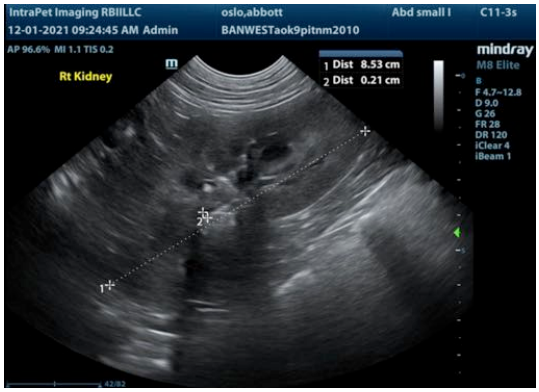
12-01-2021 09:23:37 AM Admin
BANWESTaok9pitnm2010
AP 96.6% MI 1.3 TIS 0.3
mindray
M8 Elite
Bladder
PROSTATE
1 Dist 3.74 cm
2 Dist 2.10 cm





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.

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