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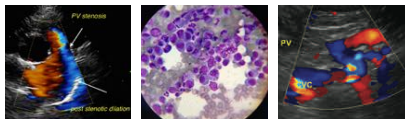

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
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DATE
12/21/21

PATIENT
Bailey Uhland

SPECIES
Feline

BREED
Domestic Shorthair

SEX
Spayed Female

AGE
1/6/10

WEIGHT
10.6 lbs

INTERPRETED BY
Eric Lindquist, DMV DABVP, Cert. IVUSS

IMAGING PERFORMED BY
Rachel Brilhart RDMS

HOSPITAL NAME
Churchville VC

REFERRING VET
Dr. Uhland

INVOICE
94807

PRESENTING CLINICAL SIGNS

History: Nov 2021 - UTI that cultured negative and did not respond to Convenia, Orbax. Responded clinically to doxycycline x 14 days - possible mycoplasma since cultured negative prior to abx and responded best to doxycycline? Symptoms resolved for about three weeks, then recurred. Patient is urinating larger volumes outside litterbox. Patient maintenance diet is c/d stress, on nurture calm collar.
Current Medications: Doxycycline 5 mg/kg bid x 10 days, Proviable SID, completed Onsior course and Cerenia course ~ 3 days ago.
Lab Results: Nov 2021 - CBC/Chem/T4/UA – wnl. Urine culture prior to abx - negative, in-house urine sediment - large amt RBC, WBC and TNTC bacteria. Repeat urine sediment Dec 2021 when signs recurred - WBC, RBC and bacteria, though subjectively fewer per hpf compared to episode in Nov.
Radiographs: abd rad - no radio-opaque urolith noted.
Date of Previous IntraPet Ultrasound: No previous IntraPet scans.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The **urinary bladder** and visible pelvic urethra were unremarkable for the level of repletion presented. The urine, however, did present some mildly echogenic debris consistent with mucous, exfoliated cells from renal or bladder origin, and/or blood clots as these echogenic changes can all present similarly. This is often related to urinary tract infection but may represent simple evidence of exfoliated debris or sterile inflammation. Cystocentesis, urinalysis, +/- culture would be recommended to rule out and define any UTI.

The **kidneys** presented a relatively uniform cortical hyperechogenicity when compared to the renal medulla, spleen and liver. No overt masses were noted. Corticomedullary definition was nebulous and the ratio favored the cortex slightly. The ureters were not visible and assumed to be normal. These changes are most consistent with chronic interstitial nephritis yet infiltrative disease could not be entirely ruled out without biopsy though neoplasia is not suspected. Cortical infarcts were noted. The right kidney measured 3.68 cm with trace pyelectasia noted measuring 0.13 cm. The left kidney measured 3.89 cm.

Adrenal Glands

Both **adrenal glands** were visualized and recognized as having normal shape, size, position and echogenicity for this breed. The phrenic vasculature, glandular echogenicity and detail were unremarkable. Capsule, cortex, and medullary definition were normal for this age patient.

Spleen

The **spleen** presented a smooth homogeneous parenchyma hyperechoic to liver and renal cortical parenchyma. The capsule was smooth without noticeable expansion or deviation from within the spleen or adjacent pathology. The splenic vasculature demonstrated normal volume without signs of congestion or thrombosis. No sonographic evidence of acute or chronic inflammatory, neoplastic, or infarctual changes was noted.

Liver

The **liver** images submitted revealed subjectively normal liver size, contour, and structure. Parenchymal echogenicity was naturally coarse and hypoechoic to the spleen. Vascular and biliary tracts were of normal volume with no evidence of congestion. The gallbladder presented acceptably thin walls with primarily anechoic content. The cystic and common bile ducts were normal. No pathological hepatic lymphadenopathy

was evident. No overt structural evidence of inflammatory, infiltrative or regenerative pathology was evident.

Gastrointestinal

Examination of the **gastrointestinal tract** revealed a stomach and intestine free of stasis, of normal wall thickness, acceptable curvilinear mural detail, and peristaltic activity. Small and large intestine demonstrated normal luminal chyme and stool consistency respectively. No obstructive or overt infiltrative disease was noted. No associated abnormal lymphatic activity was noted.

Pancreas

The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Some parenchymal remodeling, however, with mild deviation from curvilinear normalcy was observed. Pancreatic duct and capsular irregularities were present consistent with age related changes. If pain upon imaging (+ Murphy sign) was present or if the patient is focally painful in subxiphoid palpation then low-grade smoldering chronic pancreatitis should be suspected.

ULTRASONOGRAPHIC FINDINGS

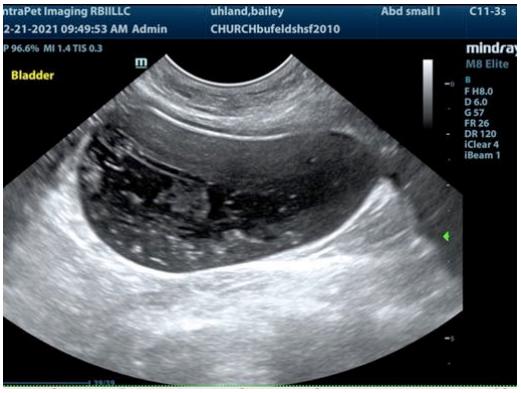
Bladder debris.
Renal infarcts.
Mild to moderate chronic renal changes, non-specific.
Prominent pancreas.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Resistant bacteria or embedded infection within the kidneys are both potentials. Structurally the abdomen appears fairly benign. Subxiphoid palpation is recommended to assess for pain-solicited response. If pain is noted low grade pancreatitis is suspected. Assessment of the vaginal vestibule is recommended for predisposing issues such as pyoderma or similar should be considered. 6-week antibiotic protocol may be appropriate in this patient in an attempt to clear any residual infection that may be buried in the kidneys.

Canine Chronic UTI Protocol

I recommend **Enrofloxacin** (5-10 mg/kg SID PO) (In patients > 1 year of age) in late pm after urination to maximize urinary concentrations overnight. This assumes that culture supports this use. Repeat **culture** at 3-4 weeks and continue treatment at least 7-10 days post negative urinary sediment and negative culture. *Note: Negative culture does not necessarily mean lack of UTI*. Other favorite antibiotics for chronic UTI include third generation Cefa (Ceftiafur or similar s.i.d. injectable) or Clavamox. If suspicion of occult urinary incontinence is present then **phenylpropanolamine (PPA)** (1-2 mg/kg BID) can be employed long term to enhance urethral tone.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uhland,bailey
Abd small I
C11-3s
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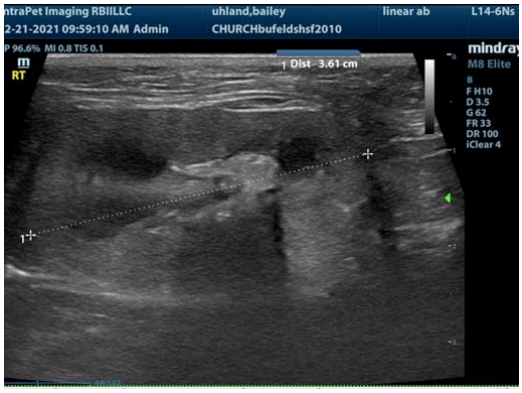
Bladder
mindray
M8 Elite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uhland,bailey
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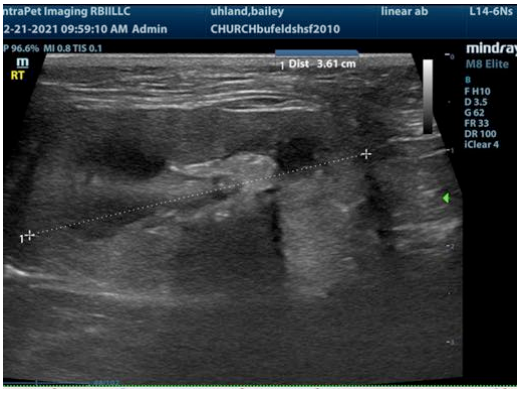
mindray
M8 Elite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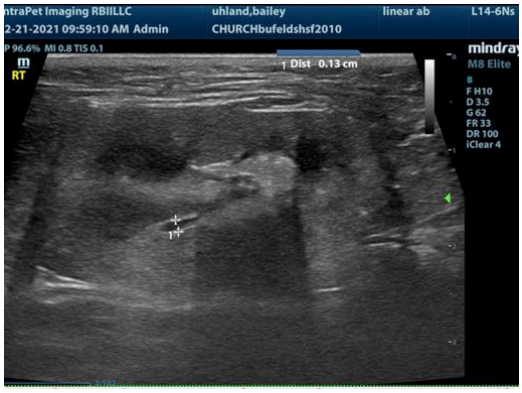
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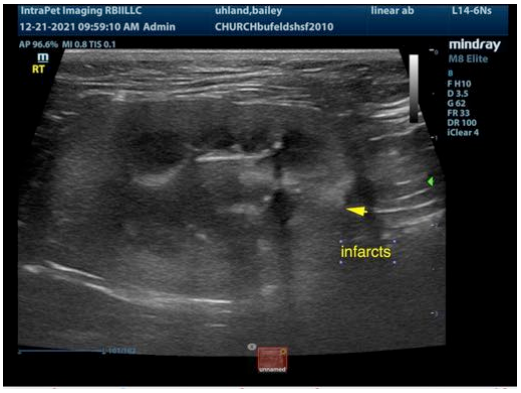
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infarcts
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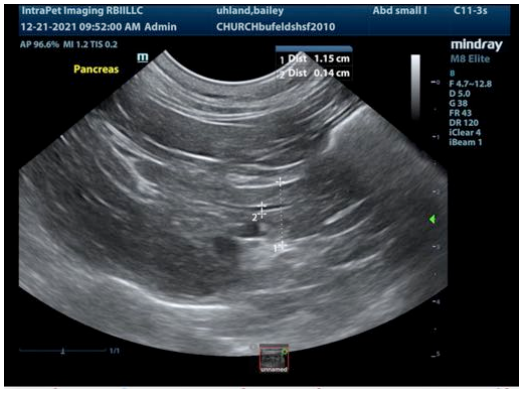
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uhland,bailey
Abd small I
C11-3s
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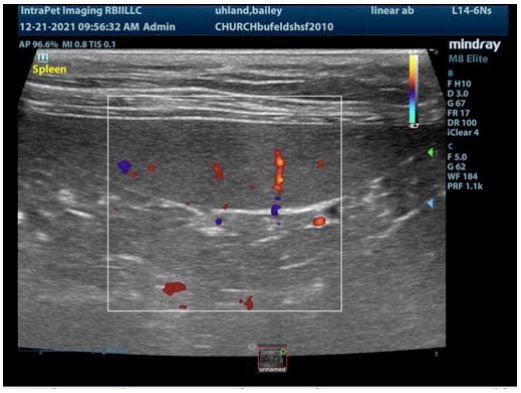
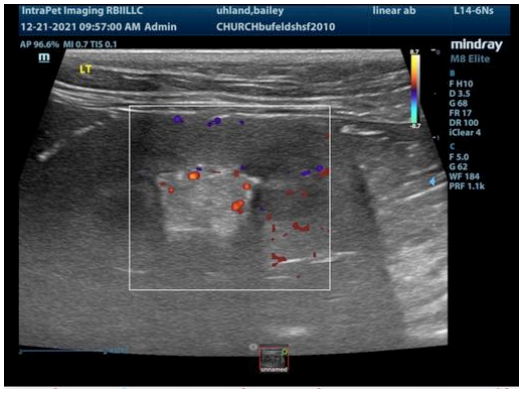
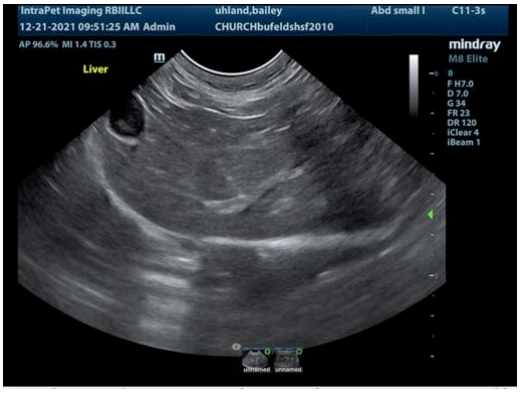
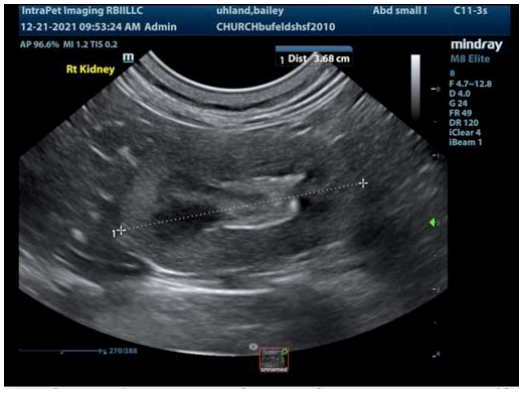
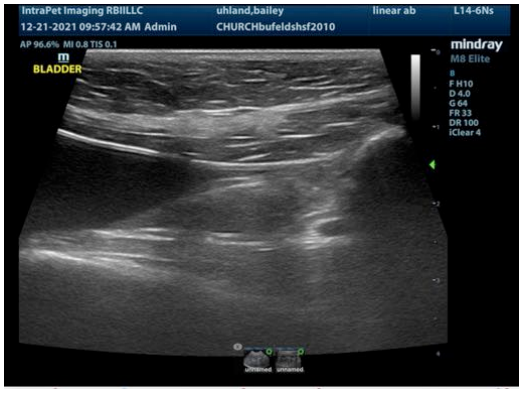
AP 96.6% MI 1.2 TIS 0.2
Pancreas
Dist 1.15 cm
Dist 0.14 cm
mindray
M8 Elite











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.

Eric Lindquist, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com
Eric.Lindquist@SonoPath.com