



PATIENT PRESENTING CLINICAL SIGNS

Buster Feliu FUO, lethargic, diarrhea past 3 weeks, occ. vomiting. Current meds: Metronidazole 75mg bid, Zenequin 25mg sid, Visbiome daily.

SPECIES Abnormal PE/Chem/CBC/UA Results: ALB 1.9, ALKP 1263, AMYLASE 1314, WBC 27K, NEUT 25K

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

BREED *Urinary System*

Chihuahua The **urinary bladder** revealed sand accumulation, approximately 1.0 cm grouping. The bladder itself was unremarkable and non-obstructive at the time of the sonogram. The pelvic urethra was imaged 3.0 cm beyond the cystourethral junction.

SEX The residual prostate measured 0.62 cm.

Neutered Male

The **kidneys** revealed largely normal size and structure, corticomedullary definition and ratio (cortex 1/3 of medulla) were essentially maintained with some age-related loss of curvilinear patterns regarding the capsule and C/M junction. The cortices presented largely uniform texture with some increased echogenicity expected for his age patient. Medullary structure differed distinctly from that of the cortex and no evidence of pelvic dilation was present. The right kidney measured 4.8 cm.

AGE

7 Years

Adrenal Glands

WEIGHT

12 Pounds

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. The right adrenal gland measured 1.4 cm x 0.78 cm at the cranial pole and 0.61 cm at the caudal pole. The left adrenal gland measured 1.7 cm x 0.52 cm at the cranial pole and 0.49 cm at the caudal pole.

INTERPRETED BY

Eric Lindquist, DMV

DABVP, Cert. IVUSS

Spleen

IMAGING PERFORMED BY

Shari Reffi, CVT

The **spleen** presented a smooth homogeneous parenchyma hyperechoic to liver and renal cortical parenchyma. The spleen measured 1.63 cm. 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 were noted.

HOSPITAL NAME

Tranquility VC

Liver

REFERRING VET

Dr. Christensen

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.

INVOICE

41104

DATE

9/8/22

Gastrointestinal

The **stomach** was empty. Areas of mucosal fogging noted in the portions of the small intestine. The mid abdomen presented variable areas of intestinal thickening with a particular region that appears to be transverse colon or superimposing jejunum with loss of structural detail. Regional lymphadenopathy present with heterogeneous omental adhesions and moderate free fluid. An epigastric lymph node was mildly enlarged at 5.0 mm as well as mesenteric lymphadenopathy.



PATIENT

Pancreas

Buster Feliu

The **pancreas** revealed hypoechoic, undulating contour with enhanced surrounding mesentery. Some level of pancreatitis likely.

SPECIES

Free Abdomen

Canine

Free fluid noted throughout the abdomen with reactive mesentery noted around the intestinal tract.

BREED

Chihuahua

- Bladder sand
- Variable intestinal thickening with regional lymphadenopathy
- Hypoechoic pancreas
- Free fluid

SEX

Neutered Male

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

AGE

7 Years

Given that the albumin is reported to be 1.9, this is not adequate to cause spontaneous free fluid formation on its own. Secondary factors such as lymphatic obstruction or paraneoplastic effusion are concerns. Options in this patient include direct exploratory surgery with the objective of inspecting the mid abdominal intestinal presentation and obtaining GI and lymph node biopsies as well as addressing any adhesions present. Given the low albumin, protein losing enteropathy is likely, yet an underlying neoplastic process is a strong concern, such as lymphoma.

WEIGHT

12 Pounds

The bladder sand could also be addressed surgically, yet is minor and not the primary issue in this case. Prognosis is guarded. Other option is to treat for protein losing enteropathy and enteritis and reimage in approximately 24-48 hours after 12-18 hour NPO status to assess if any improved acoustic windows are present, given the extensive adhesions and mesenteric inflammation. Prognosis is extremely guarded. No obvious foreign bodies present. However, passage of foreign matter into the proximal colon or embedded foreign matter into the intestinal wall could not be completely ruled out. My personal preference would be exploratory surgery in this patient.

INTERPRETED BY

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IMAGING PERFORMED BY

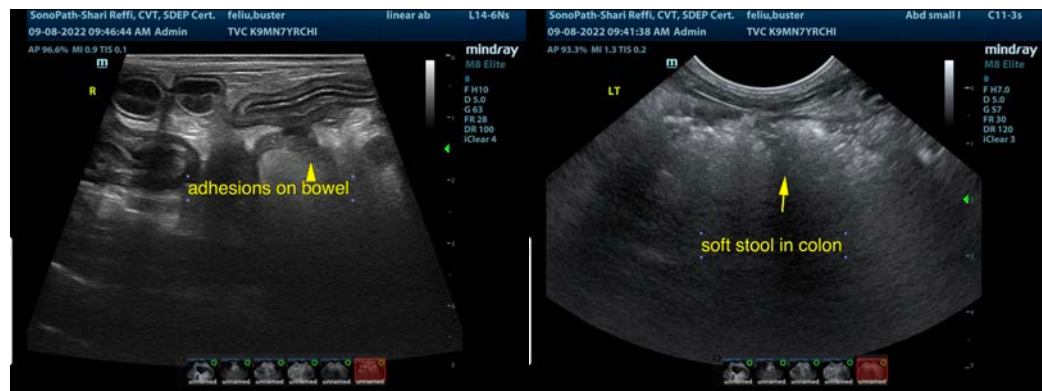
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SPECIES

Canine

BREED

Chihuahua

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Neutered Male

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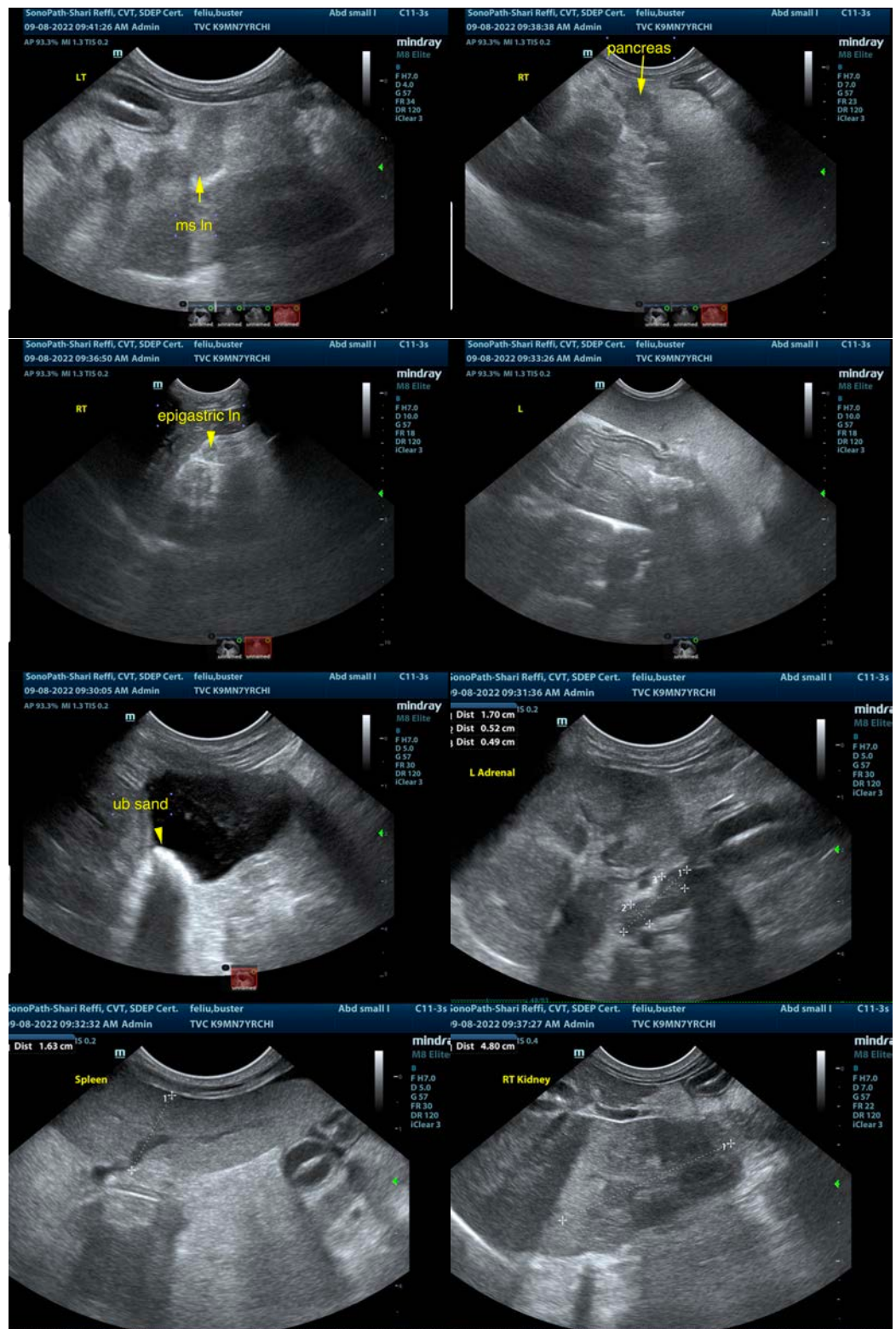
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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

info@SonoPath.com