

**DATE**

05/23/2022

PRESENTING CLINICAL SIGNS

Recent GI upset including decreased appetite, vomiting/regurgitation. Kidney and liver changes on labwork, gallbladder irregularities seen in radiographs and in-house ultrasound.

PATIENT

Pepper White

Current Medications: Krilllex 1/4 chew daily; Entero pro powder 1/8 tsp sid; biodent 1/2t sid; ocu-glow sid. starting cerenia 4mg sid; onsiol 3mg sid; ursodiol 40mg sid

Lab Results: See attached.

Radiographs: See attached.

Date of Previous IntraPet Ultrasound: 12/10/20. See attached.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Rachel Brillhart, RDMS.

SPECIES

Canine

BREED

Chihuahua

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**SEX**

MN

Urinary System**AGE**

9 yr

The urinary bladder, trigone, and pelvic urethra presented normal thicknesses and normal tone. The ureters were not visible which is normal. No uroliths or sediment were visualized and anechoic urine was present. No evidence of inflammatory or neoplastic changes were noted. Ureteral papillae were normal.

WEIGHT

7.1 lb

The kidneys revealed normal size and structure, corticomodullary definition and ratio for this age. The cortices presented largely uniform texture with normal echogenic relationship to liver and spleen. Medullary structure differed distinctly from the cortex and no evidence of pelvic dilation was present. The right kidney exhibited slight pinpoint mineralization. The capsules were acceptably uniform without significant irregularities. The left kidney measured 3.29 cm in length. The right kidney measured 3.36 cm in length.

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

The residual prostate was free of pathology measuring 0.86 cm.

HOSPITAL NAME

Happy Tails Veterinary
Hospital

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. The left adrenal gland measured 1.43 cm in length by 0.45 cm caudal pole width by 0.45 cm cranial pole width. The right adrenal gland measured 1.11 cm in length by 0.39 cm caudal pole width by 0.46 cm cranial pole width.

REFERRING VET

Dr. Calpeno

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 were noted.

INVOICE

10655ag

Liver

The liver images from right and left intercostal as well as subcostal views revealed subjectively normal liver size, contour, and structure. Some minor age-related parenchymal remodeling was noted but likely not

clinically significant at this time. Vascular and biliary tracts were of normal volume and no evidence of congestion was noted. The gallbladder presented with sand accumulation measuring up to 1.54 cm. Gallbladder calculus noted along with the sand measuring 1.63 cm. The cystic and common bile ducts contained sand accumulation measuring 0.47 cm in width. No overt evidence of active inflammatory, infiltrative or regenerative pathology was noted but should be paired with current or past LE elevations regarding any clinical significance to this presentation. The hepatic lymph nodes were unremarkable.

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

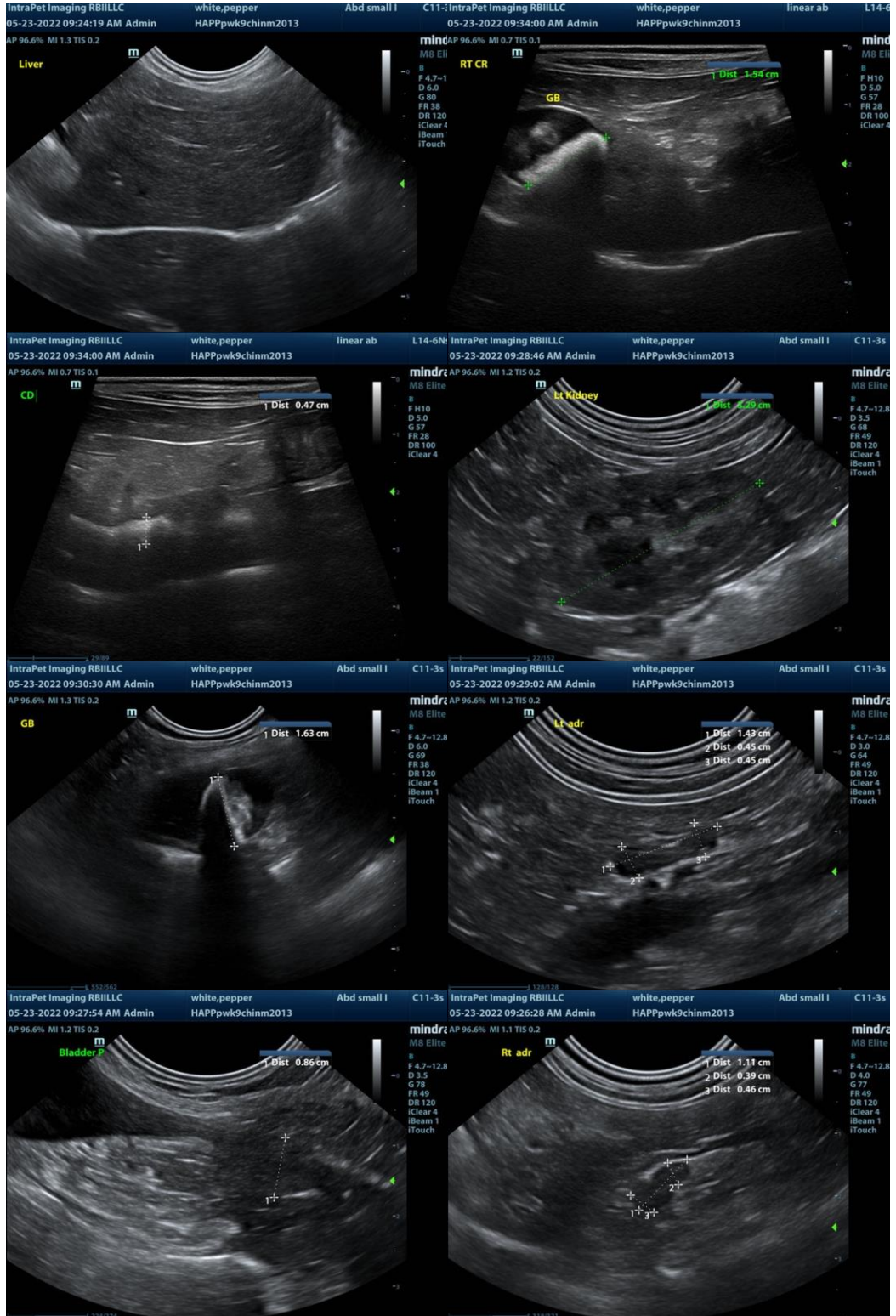
Pancreatic remodeling was noted with hyperechoic changes. No evidence of active inflammation was observed.

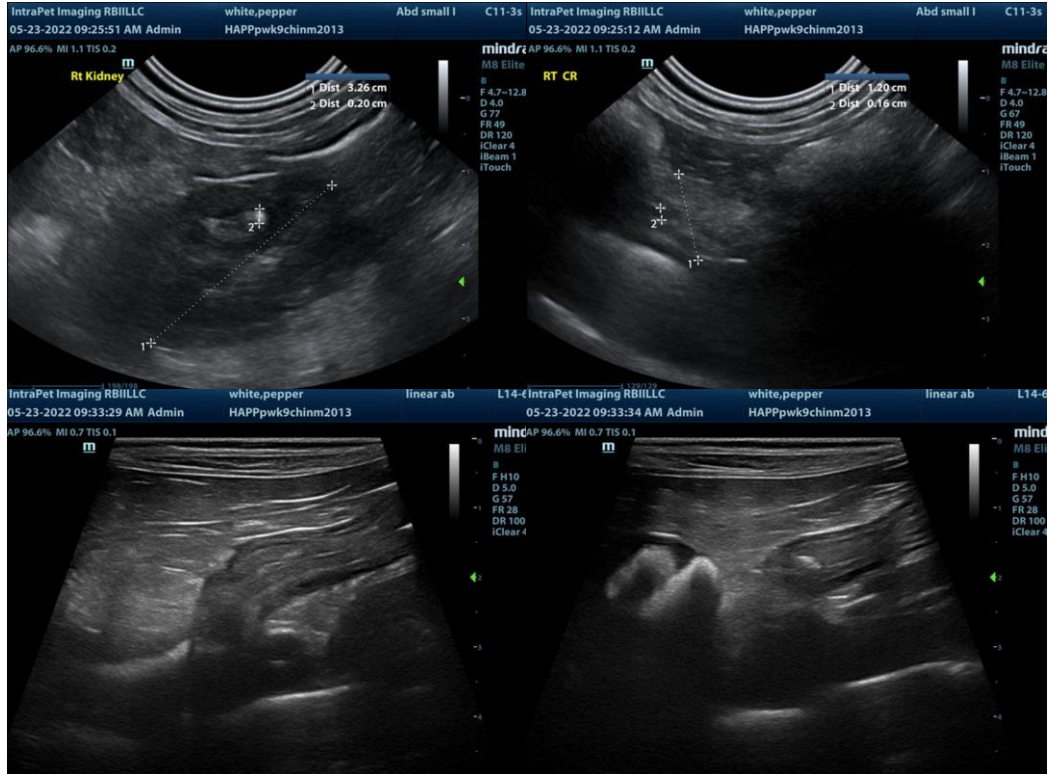
ULTRASONOGRAPHIC FINDINGS

- Gallbladder sand and calculus with CBD and cystic duct sand. Nonobstructive at this time, however the patient may obstruct at any time.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Cholecystectomy with CBD lavage would be ideal, however Ursodiol therapy could be considered to attempt to dissolve the biliary sand. This is highly variable patient to patient. If this approach is taken, a recheck sonogram is recommended after 6 weeks of treatment with monitoring of any clinical signs such as anorexia or rapid rise in liver values. The poor appetite and GI signs may be related to gallbladder discomfort, this would be further supported by deep subxiphoid palpation to assess for any discomfort. GI biopsies could be collected at the time of surgery if elected. Given the pancreatic remodeling, a history of pancreatitis is likely in this patient. The patient's dietary regimen should be reevaluated.





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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