



PATIENT	PRESENTING CLINICAL SIGNS
Pepper Brooks	Murmur r/o: CCVD, anemia, open 2. After discussing Pepper's murmur owner elects preliminary three view thoracic radiographs. 3. Senior BW w/ UA pending. Radiographic Finding's: Thorax - no evidence of cardiomegaly or pulmonary/pleural edema. Abdomen - just the cranial aspect of abdomen reveals a large radiopaque density over the right liver lobes. I suspect it is the gall bladder.
SPECIES	Abnormal PE/Chem/CBC/UA Results: very slight elevation in her kidney values.
Canine	
BREED	ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN
Yorshire Terrier Mix	Urinary System
SEX	The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2.0 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with no uroliths or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes was noted.
FS	
AGE	The area of the aortic trifurcation was free of pathology.
12 years	
WEIGHT	Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and mild to moderate loss of corticomedullary symmetry and definition expected for the age of the patient. Focal areas of nonobstructive medullary mineral to small renoliths were present in both kidneys. No evidence of pyelectasia was present. The left kidney measured 3.0 cm in length. The right kidney measured 2.9 cm in length.
6.0 lbs.	
INTERPRETED BY	Adrenal Glands
R. McKenzie Daniel, DVM, DABVP (Canine and Feline)	The bilateral adrenal glands were normal in size. Mild parenchyma heterogeneity and mild capsule asymmetry were present without suspicion for overt neoplasia. The left adrenal gland measured 1.6 cm length x 0.50 cm width at the caudal pole. The right adrenal gland measured 1.2 cm length x 0.37 cm width at the caudal pole.
IMAGING PERFORMED BY	Spleen
Jenna Walsh, CVT	The spleen exhibited primarily finely textured parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Mild generalized parenchyma heterogeneity was present without evidence of nodular changes. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. The parenchymal heterogeneity is likely consistent with benign changes such as extramedullary hematopoiesis or age-related remodeling with minor potential for inflammatory or neoplastic disease.
HOSPITAL NAME	Liver/ Gallbladder
West Salem AC	The liver was subjectively normal in size, structure, and contour. The liver parenchyma was mildly nonuniform and hypoechoic to the spleen with a moderate coarse echotexture and subjective mild to benign parenchymal remodeling. Focal areas of likely biliary tree mineralization were present. The hepatic and portal vasculature were normal in appearance without signs of congestion.
REFERRING VET	
Dr. Sirianni	
INVOICE	
12390	
DATE	
10/19/21	



PATIENT

Pepper Brooks

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BREED

Yorshire Terrier Mix

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The gallbladder was non-distended in size with moderate mineralized luminal debris and multifocal, variably sized cholelithiasis. No evidence of peripheral Inflammation was noted. The gallbladder walls were non-thickened, yet hyperechoic in appearance. The common bile duct was normal, without evidence of post-hepatic stasis or obstruction.

Gastrointestinal

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with no signs of ileus, obstruction, or foreign material.

The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of ileus, obstruction, or foreign material.

Normal visible colon wall layers were present with apparent formed feces in lumen.

Pancreas

The parenchyma of the left limb, body, and right limb of the pancreas presented isoechoic to the adjacent omental fat. A normal curvilinear capsule contour of the pancreas was present. The visible pancreatic duct was normal. No signs of active inflammation or neoplastic disease were evident.

Free Abdomen

No overt lymphadenopathy or peritoneal effusion was present.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Bilateral chronic renal changes with nonobstructive medullary mineralization / renolithiasis
- Hepatic parenchymal remodeling with focal minor biliary tree mineral
- Moderate, nonobstructive cholelithiasis with suspect mild chronic cholecystitis

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Given the lack of reported hepatic enzyme elevations or cholestasis, the choleliths did not appear to be a clinical issue at this time. However, further monitoring for evidence of increasing hepatic enzymes or cholestasis is recommended. Hepatosupportive medications including Ursodiol may prove beneficial. Further renal staging to include urine C/S and protein: creatinine ratio on sterile urine sample may be considered. An immediate recheck sonogram is recommended if evidence of increasing cholestasis, hepatic enzyme elevations, or cranial abdominal / subxiphoid discomfort on palpation.



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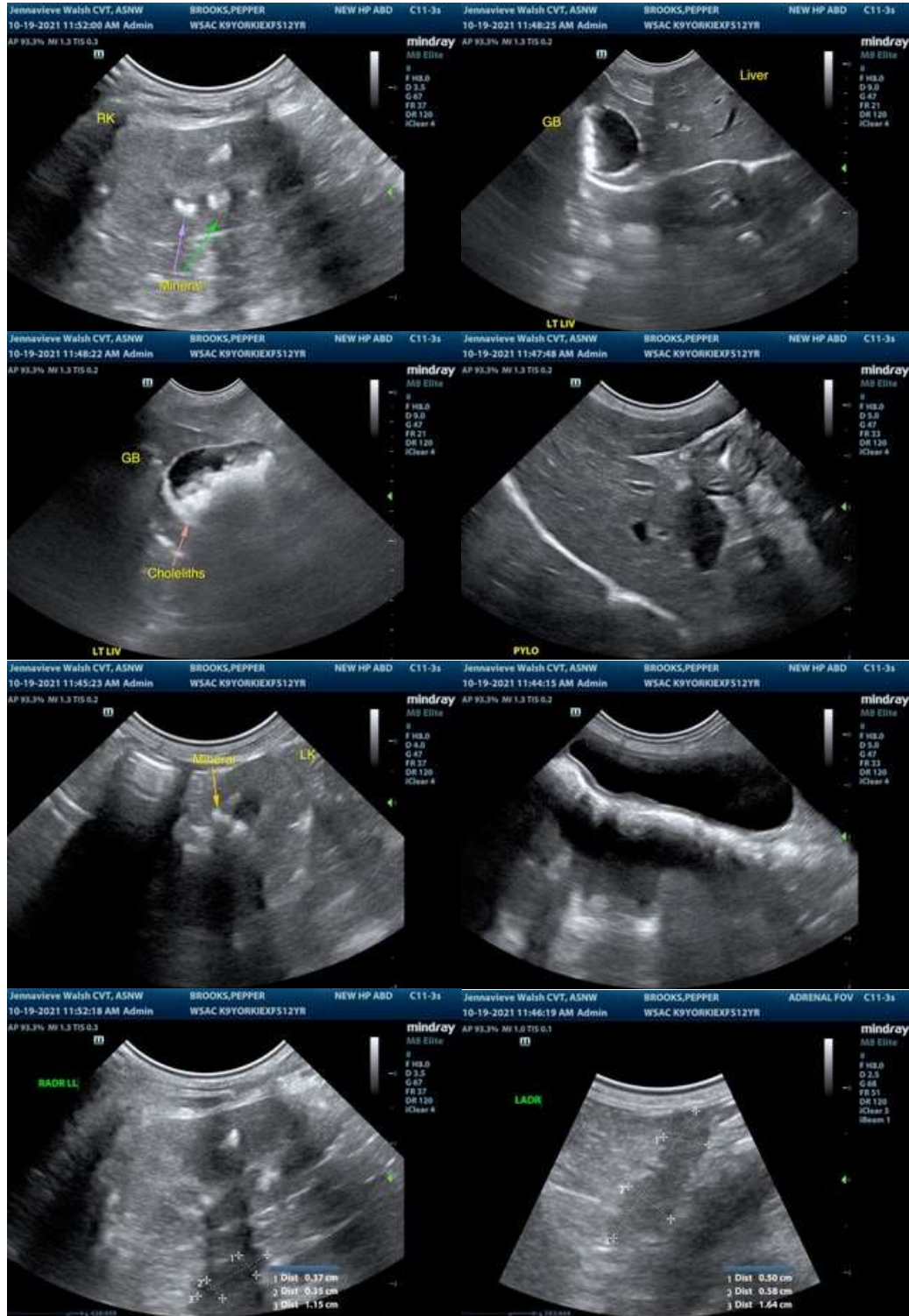
Dr. Sirianni

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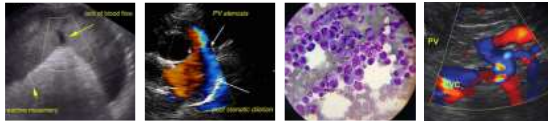
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The information and recommendations provided are based on the images presented by the



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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.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)
info@SonoPath.com