



<b>PATIENT</b>	<b>PRESENTING CLINICAL SIGNS</b>
Maggie Witherspoon	Presented 5/7/22 for licking a block of bromethalin rat bait.' Historic elevated liver enzymes, notable today. Client allows US PE: QAR to BAR, sweet. Stable.
<b>SPECIES</b>	Abnormal PE/Chem/CBC/UA Results: CBC: all wnl Chem17: BUN 55 (Creat 1.2), TP 8.4, Glob 4.6, ALT 971, ALKP 1920, GGT 16, rest wnl Lytes: K 4.6, Cl 114 5/8/22: 5 am EPOC: BUN 49, K 3/6, Na 151, HCT 42% Na 151 US: Early findings note circular multi cavitary lesion in the left mid to ventral lobe of the liver.
Canine	
<b>BREED</b>	<b>ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN</b>
Shih Tzu	<b>Urinary System</b>
<b>SEX</b>	The <b>urinary bladder</b> , 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.
Spayed Female	
<b>AGE</b>	The <b>kidneys</b> 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. The right kidney measured 4.37 cm.
13 Years	
<b>WEIGHT</b>	<b>Adrenal Glands</b>
14.3 Pounds	The <b>right adrenal gland</b> was visualized obliquely and measured 0.42 cm. The <b>left adrenal gland</b> measured 0.31 cm, visualized obliquely.
<b>INTERPRETED BY</b>	<b>Spleen</b>
Eric Lindquist, DMV	The <b>spleen</b> 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.
DABVP, Cert. IVUSS	
<b>IMAGING PERFORMED BY</b>	<b>Liver</b>
Dr. Schneck	The <b>liver</b> presented coarse architecture and increased portal markings. Heterogeneous parenchymal changes noted. The left lateral liver revealed a 2.8 cm x 1.5 cm hypoechoic, microcystic nodule, likely complicated cyst. The gallbladder was overdistended with striating bile. Thickened, echogenic wall, consistent with chronic cholecystitis and emerging mucocele.
<b>HOSPITAL NAME</b>	<b>Gastrointestinal</b>
Willamette VH	Examination of the <b>gastrointestinal tract</b> 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.
<b>REFERRING VET</b>	<b>Pancreas</b>
Dr. Schneck	
<b>INVOICE</b>	
37520	
<b>DATE</b>	
5/8/22	



## PATIENT

Maggie Witherspoon

The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Pancreatic duct and capsular contour were acceptably normal and parenchyma respected normal curvilinear patterns. No overt evidence of active inflammatory or neoplastic disease was noted.

## SPECIES

Canine

## ULTRASONOGRAPHIC FINDINGS

- Non-specific chronic renal changes with interstitial nephrosis pattern – acute on chronic insult likely.
- Emerging gallbladder mucocele/chronic cholangitis/cholecystitis
- Hepatic cyst and minor remodeling with vacuolar hepatopathy pattern

## BREED

Shih Tzu

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Full mucocele criteria is not present in the gallbladder. However, it may be adding to low-grade clinical signs. IV fluid support, correction of azotemia, Ursodiol therapy and/or gallbladder motility study could all be justified. Bile acid profile warranted. If patient is able to be stabilized, Ursodiol therapy recommended over the next 6 weeks with recheck sonogram of the gallbladder. Ultrasound guided FNA of the liver parenchyma as well as drainage of the left sided cyst could also be considered. If flocculent material is drained from the cyst, then culture indicated.

## SEX

Spayed Female

## AGE

13 Years

## WEIGHT

14.3 Pounds

## INTERPRETED BY

Eric Lindquist, DMV

DABVP, Cert. IVUSS



## IMAGING PERFORMED BY

Dr. Schneck



## HOSPITAL NAME

Willamette VH

## REFERRING VET

Dr. Schneck

## INVOICE

37520

## DATE

5/8/22



**PATIENT**

Maggie Witherspoon

**SPECIES**

Canine

**BREED**

Shih Tzu

**SEX**

Spayed Female

**AGE**

13 Years

**WEIGHT**

14.3 Pounds

**INTERPRETED BY**

Eric Lindquist, DMV

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**IMAGING PERFORMED BY**

Dr. Schneck

**HOSPITAL NAME**

Willamette VH

**REFERRING VET**

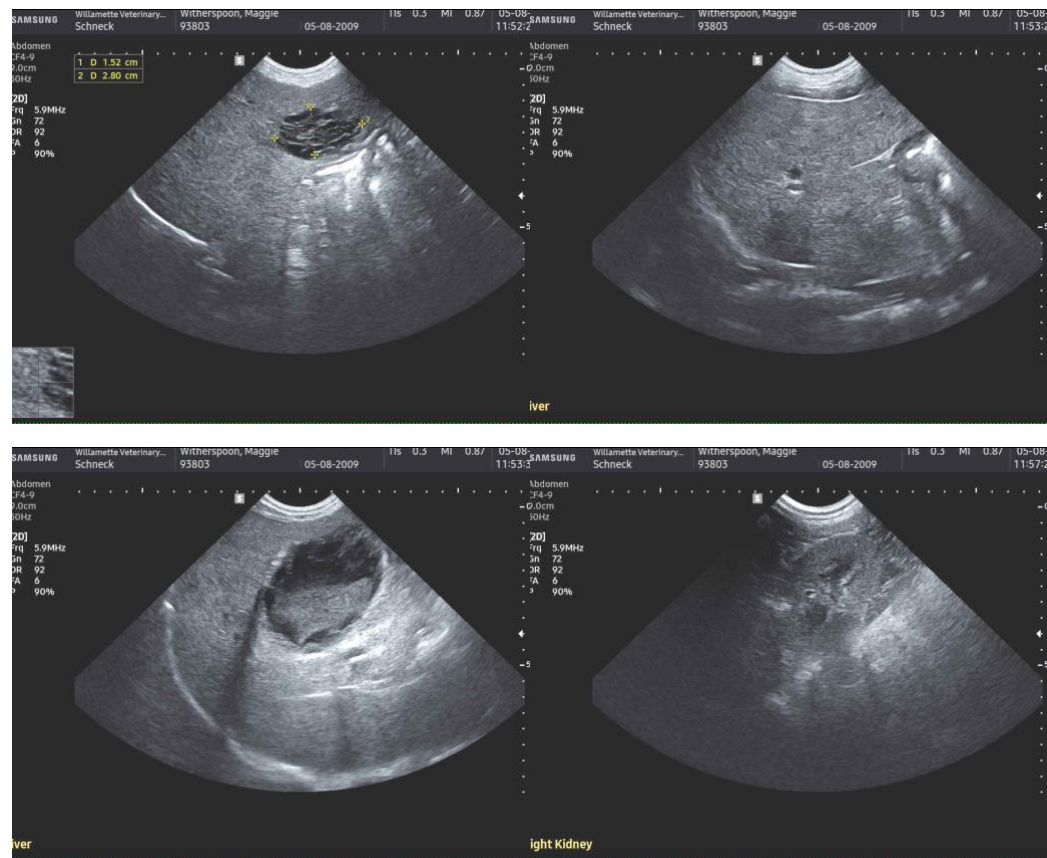
Dr. Schneck

**INVOICE**

37520

**DATE**

5/8/22



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

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