

**PATIENT PRESENTING CLINICAL SIGNS**

Toby Smith History: Enlarged liver on radiographs. Abdomen palpated distended on physical exam.  
Abnormal PE/Chem/CBC/UA Results: 3/1 Lab Results: WBC elevated ALP elevated Radiographs  
Enlarged liver collapsed trachea Recommend abd US to further evaluate liver.

**SPECIES**

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**BREED**

Chihuahua

**Urinary System**

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 was noted. Ureteral papillae were normal.

**SEX**

Neutered male

**AGE**

13 years

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.

**WEIGHT**

10.4 lbs

**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 0.5 cm. The right adrenal gland measured 0.6 cm.

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUS

**IMAGING PERFORMED BY**

Dr. Gallick

**Spleen**

The **spleen** was largely smooth with subtle heterogeneous parenchymal changes while maintaining normal echogenic relationship to the liver and kidney. These changes are consistent with normal age-related alteration. The spleen revealed slight, irregular contour. The capsule was smooth without noticeable impingement from within the spleen or from pathology in the adjacent abdomen. The splenic vasculature demonstrated normal volume without signs of congestion or significant contraction. No evidence of active acute or chronic inflammatory, neoplastic, or infarctual changes was noted.

**HOSPITAL NAME**

Magnolia Springs VC

**REFERRING VET**

Dr. Gallick

**Liver**

The **liver** was uniformly swollen with minor, excessive gallbladder debris and over distension with dependent and suspended bile without evidence of overt mucocele formation. However, excessive sludge was present. Generalized hepatomegaly was also present. The liver presented coarse architecture with mildly increased portal markings and subtle, mixed echogenic changes. This is consistent with vacuolar hepatopathy and some level of remodeling and history of inflammatory component. There was no overt suspicion of neoplasia.

**INVOICE**

43460

**DATE**

3/22/23



**PATIENT**

Toby Smith

**Gastrointestinal**

The **gastrointestinal tract** revealed gastric luminal fluid and over distension with echogenic mucosal remodeling. Minor small intestinal thickening was noted with increased submucosal echogenicity.

**SPECIES**

Canine

**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.

**BREED**

Chihuahua

**SEX**

Neutered male

**ULTRASONOGRAPHIC FINDINGS**

Subjectively benign hepatopathy with remodeling.

**AGE**

13 years

Minor intestinal thickening and gastric fluid accumulation.

Age related renal changes.

**WEIGHT**

10.4 lbs

Pancreatic remodeling.

Subjectively benign abdomen.

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

FNA of the liver can be considered for further definition, yet subjectively appears benign.

**IMAGING PERFORMED BY**

Dr. Gallick

**HOSPITAL NAME**

Magnolia Springs VC

**REFERRING VET**

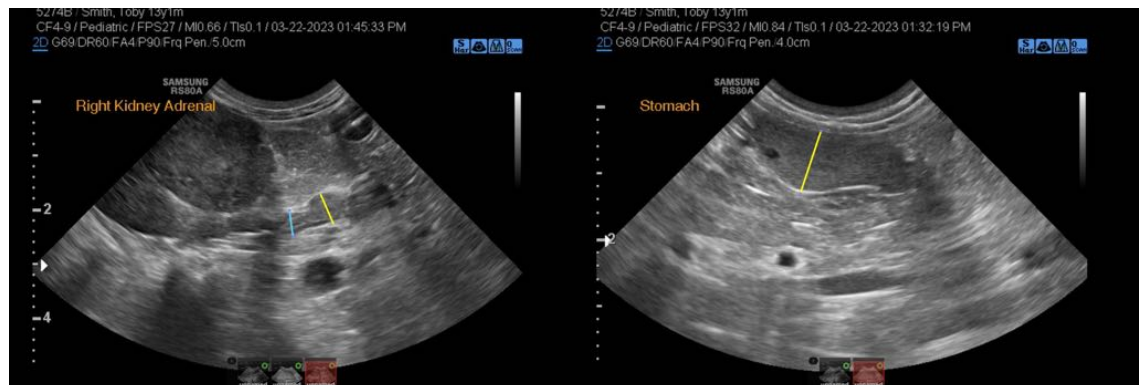
Dr. Gallick

**INVOICE**

43460

**DATE**

3/22/23





**PATIENT**

Toby Smith

**SPECIES**

Canine

**BREED**

Chihuahua

**SEX**

Neutered male

**AGE**

13 years

**WEIGHT**

10.4 lbs

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUS

**IMAGING PERFORMED BY**

Dr. Gallick

**HOSPITAL NAME**

Magnolia Springs VC

**REFERRING VET**

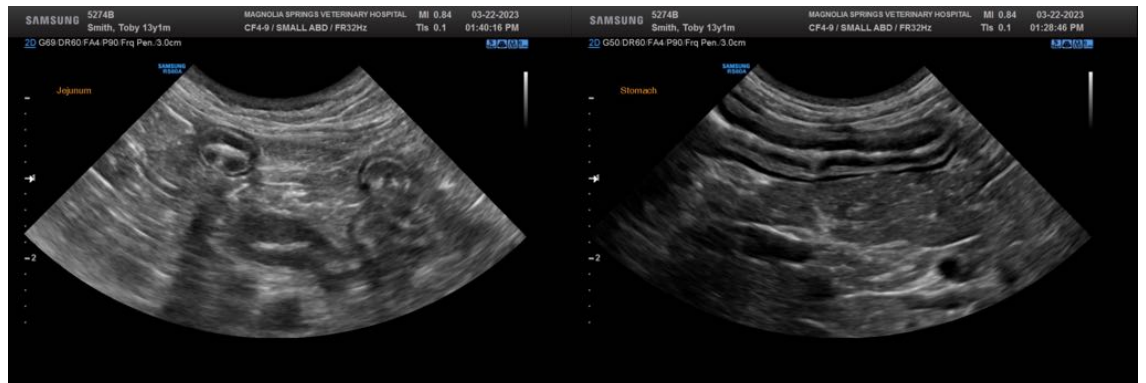
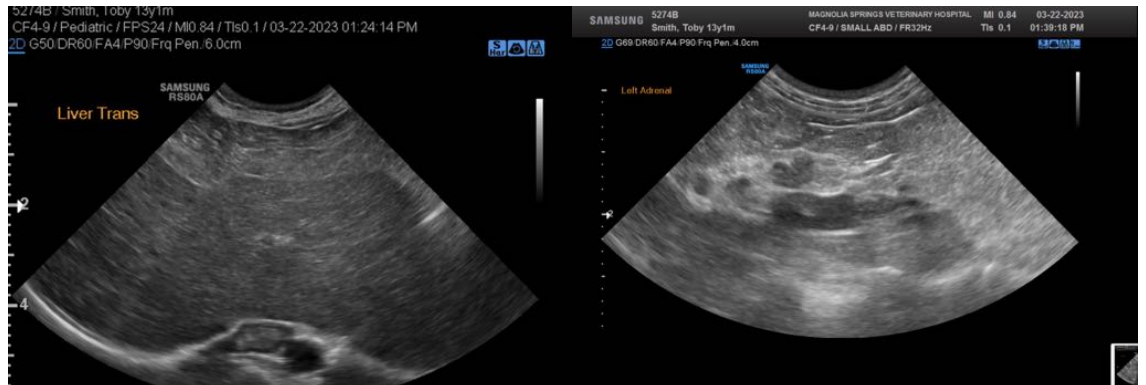
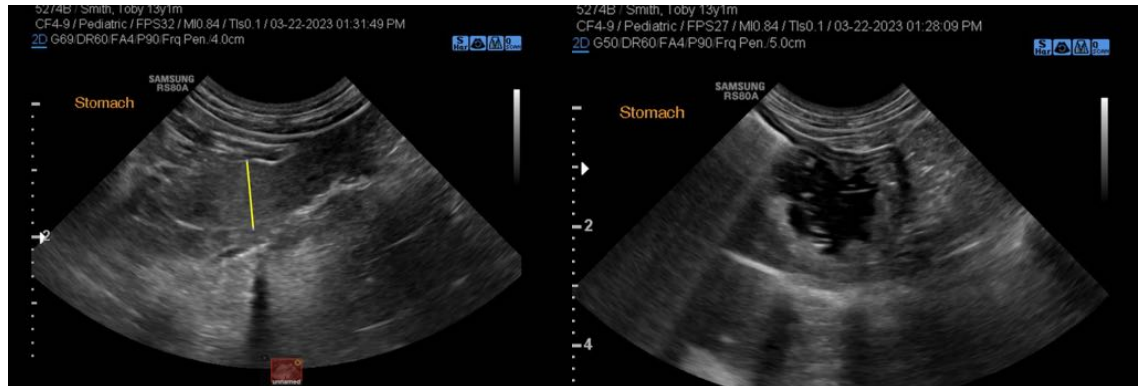
Dr. Gallick

**INVOICE**

43460

**DATE**

3/22/23





**PATIENT**

Toby Smith

**SPECIES**

Canine

**BREED**

Chihuahua

**SEX**

Neutered male

**AGE**

13 years

**WEIGHT**

10.4 lbs

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING  
PERFORMED BY**

Dr. Gallick

**HOSPITAL NAME**

Magnolia Springs VC

**REFERRING VET**

Dr. Gallick

**INVOICE**

43460

**DATE**

3/22/23

**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