



<b>PATIENT</b>	<b>PRESENTING CLINICAL SIGNS</b>
Nova Hagen	Clinically normal patient, presented for routine OHE on 7/28/21 and was found to have an elevated ALT on pre-surgical bloodwork. Owner reported did vomit and have diarrhea the weekend prior but now back to normal. Nothing they know of she got into.
<b>SPECIES</b>	Abnormal Laboratory Findings ALT = 712 (0-120) Preprandial bile acids = 19.8 (0-14.9) Postprandial BA = 135.1 (0-29.9)
Canine	
<b>BREED</b>	<b>ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN</b>
Miniature Schnauzer	<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 was noted. Ureteral papillae were normal.
Female	
<b>AGE</b>	The <b>kidneys</b> revealed normal size and structure, corticomedullary 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. The capsules were acceptably uniform without significant irregularities. The right kidney measured 3.95 cm. The left kidney measured 3.2 cm with pyelectasia that measured 0.4 cm.
7 months	
<b>WEIGHT</b>	
10.1 lbs	
<b>INTERPRETED BY</b>	<b>Adrenal Glands</b>
Eric Lindquist, DMV DABVP, Cert. IVUSS	Both <b>adrenal glands</b> appear subnormal in size. The right adrenal gland measured 0.36 cm. The left adrenal gland measured 0.28 cm.
<b>IMAGING PERFORMED BY</b>	<b>Spleen</b>
Dr. Weisman	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 was noted.
<b>HOSPITAL NAME</b>	
Rockaway AH	
<b>REFERRING VET</b>	<b>Liver</b>
Dr. Weisman	The <b>liver</b> was moderately subnormal in size with coarse architecture. The liver revealed heterogenous parenchymal changes with normal intrahepatic vasculature based on the image set provided. The vena cava measured 0.5 cm, aorta 0.5 cm with a normal 1:1 vena cava and aortic ratio. The portal vein was followed in its branching and is normal in size and contour measuring 0.6 cm. There was no evidence of extrahepatic shunt. The gallbladder and common bile duct are unremarkable.
<b>INVOICE</b>	
91261	
<b>DATE</b>	
8/16/21	



**PATIENT**

**Gastrointestinal**

Nova Hagen

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.

**SPECIES**

Canine

**BREED**

Miniature Schnauzer

**Pancreas**

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.

**SEX**

Female

**ULTRASONOGRAPHIC FINDINGS**

Significantly small liver.

**AGE**

7 months

Diffuse parenchymal disease. No evidence of macroscopic shunting in intrahepatic or extrahepatic views.

**WEIGHT**

10.1 lbs

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

There was no evidence of intrahepatic or extrahepatic shunting noted. However, the liver is significantly subnormal in size. Core liver biopsy is warranted to rule out portal hypoplasia. However, I believe that the bile acid elevation is owing to parenchymal disease. Leptospirosis titers are warranted as well. If the patient is to undergo ovariohysterectomy the liver biopsies could be performed at that time. Propofol induction, and Isoflurane maintenance is recommended due to the potential of reduced hepatic function.

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

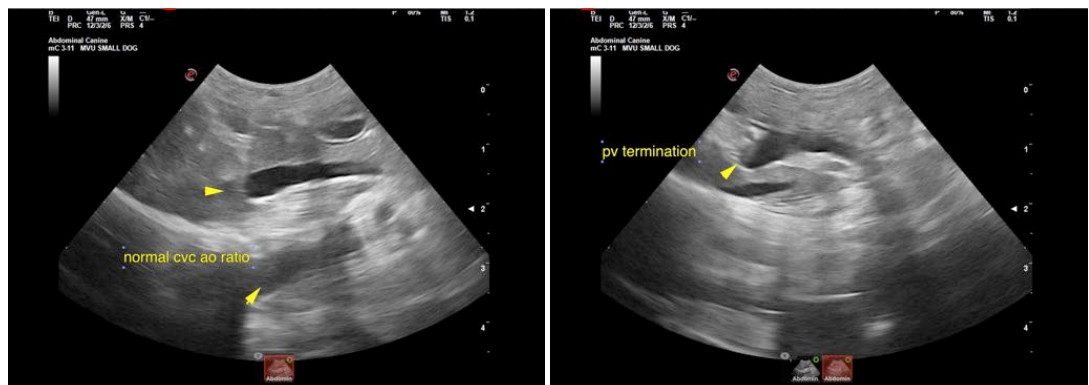
Dr. Weisman

**HOSPITAL NAME**

Rockaway AH

**REFERRING VET**

Dr. Weisman



**INVOICE**

91261

**DATE**

8/16/21



**PATIENT**

Nova Hagen

**SPECIES**

Canine

**BREED**

Miniature Schnauzer

**SEX**

Female

**AGE**

7 months

**WEIGHT**

10.1 lbs

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Dr. Weisman

**HOSPITAL NAME**

Rockaway AH

**REFERRING VET**

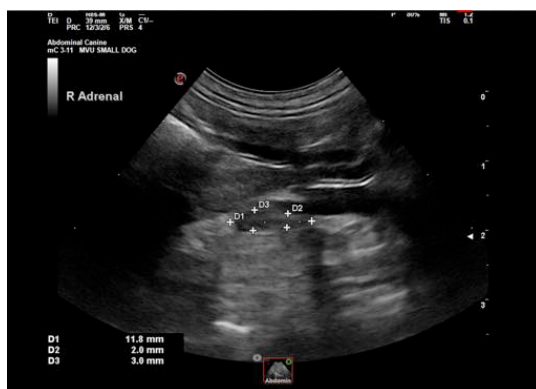
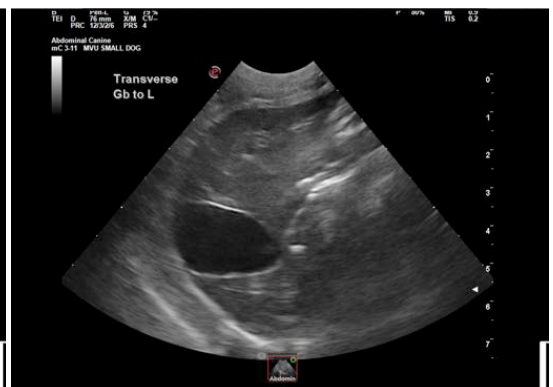
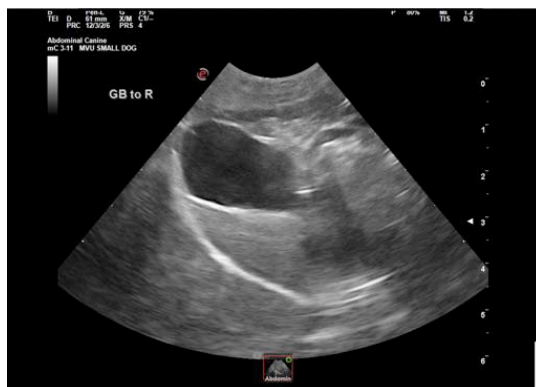
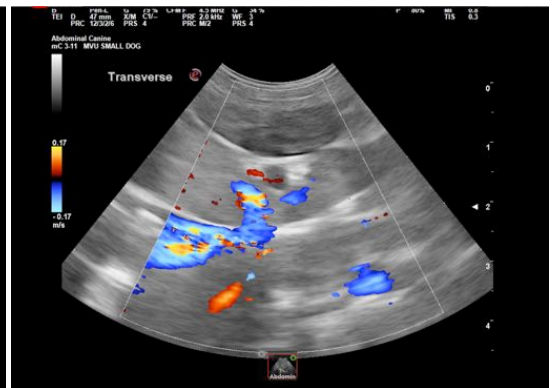
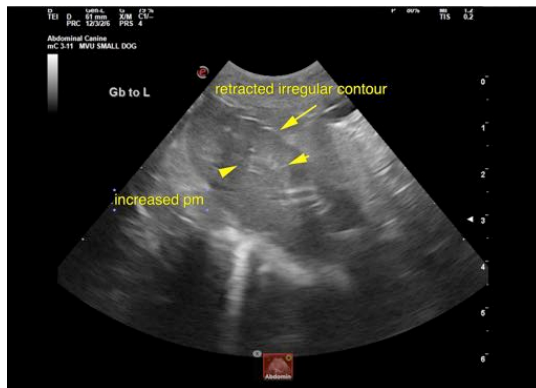
Dr. Weisman

**INVOICE**

91261

**DATE**

8/16/21





**PATIENT**

Nova Hagen

**SPECIES**

Canine

**BREED**

Miniature Schnauzer

**SEX**

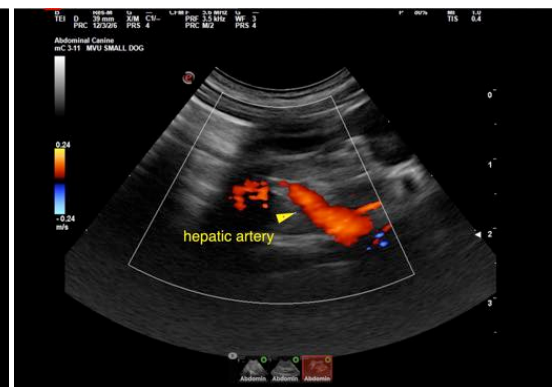
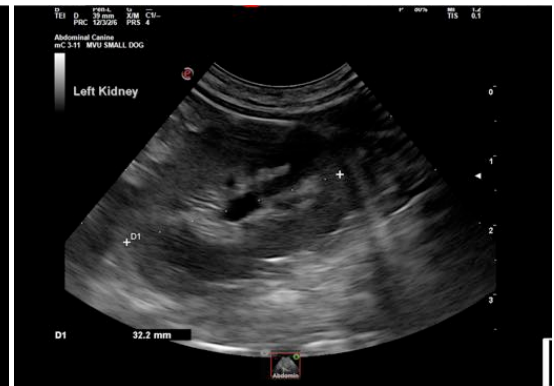
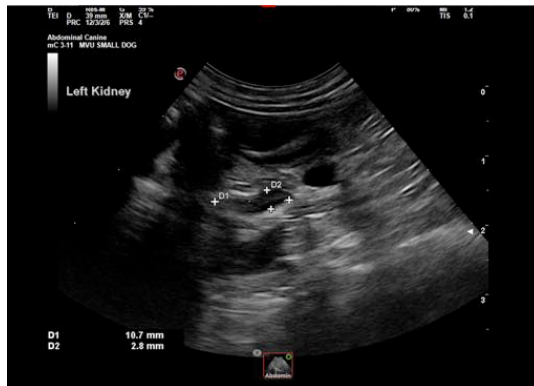
Female

**AGE**

7 months

**WEIGHT**

10.1 lbs



**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Dr. Weisman

**HOSPITAL NAME**

Rockaway AH

**REFERRING VET**

Dr. Weisman

**INVOICE**

91261

**DATE**

8/16/21

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.

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