



PATIENT	PRESENTING CLINICAL SIGNS
Rocco Ferrara	History: elevated bile acid / pre76. post 82
SPECIES	ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN
Canine	Urinary System
BREED	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.
Cavalier King Charles	
SEX	The kidneys 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 and no evidence of pelvic dilation was present. The capsules were acceptably uniform without significant irregularities. Both kidneys measured 4.0 cm.
Neutered male	
AGE	Adrenal Glands
3 years	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.
WEIGHT	
10.9 lbs	
INTERPRETED BY	Spleen
Eric Lindquist, DMV DABVP, Cert. IVUSS	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 was noted.
IMAGING PERFORMED BY	
Dr. Han	
HOSPITAL NAME	Liver
Tenafly VC	The liver revealed mildly increased portal markings and was subnormal in size. Intrahepatic vascularity appeared subjectively unremarkable. There was no intrahepatic or extrahepatic shunting. The gallbladder presented acceptably thin walls with primarily anechoic content. The cystic and common bile ducts were normal. No pathological hepatic lymphadenopathy was evident. No overt structural evidence of inflammatory, infiltrative or regenerative pathology was evident.
REFERRING VET	
Dr. Han	
INVOICE	Gastrointestinal
39494	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.
DATE	
9/20/22	



PATIENT

Pancreas

Rocco Ferrara

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

BREED

Increased portal markings and subnormal hepatic size.

Cavalier King Charles

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

SEX

A portosystemic shunt cannot be completely ruled out based on the image set provided; however, it is not overtly suspected. There is adequate hepatic remodeling to justify the bile acid elevations. History of Leptospirosis or similar should be ruled out given the sonographic pattern of the liver. Core liver biopsy and abdominal CT would be ideal to rule out portosystemic shunting.

Neutered male

AGE

3 years

Royal Canin Hepatic Support diet or Hills L/D, Metronidazole (7.5 mg/kg PO bid) over the next 14 days, Lactulose (Oral: 3.1-3.7 g/5 ml lactulose in a syrup base) long term to target 2-3 soft stools/day, with a high-quality protein supplement of minor amount of yogurt or cheddar cheese. Monitor bile acids, with attention paid to dropping albumin, BUN or cholesterol. SAME and nutraceuticals as needed. Ursodiol (10-15 mg/kg p.o. q24h) can be considered as hepatoprotectant and to enhance bile flow. Zinc serum level keep between 200–500 ug/dl. If deficient then Tx zinc acetate 1-3 mg/kg/day. Gastrointestinal protectants are recommended if the patient is anorexic.

WEIGHT

10.9 lbs

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Dr. Han

HOSPITAL NAME

Tenaflly VC

REFERRING VET

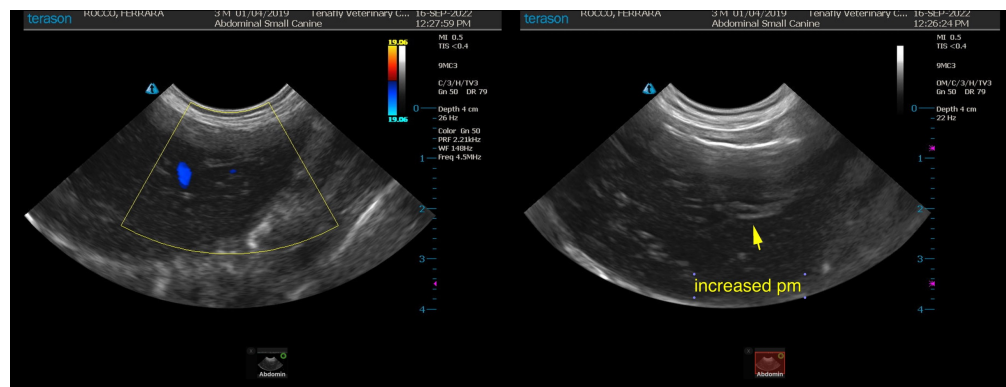
Dr. Han

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PATIENT

Rocco Ferrara

SPECIES

Canine

BREED

Cavalier King Charles

SEX

Neutered male

AGE

3 years

WEIGHT

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**IMAGING
PERFORMED BY**

Dr. Han

HOSPITAL NAME

Tenafly VC

REFERRING VET

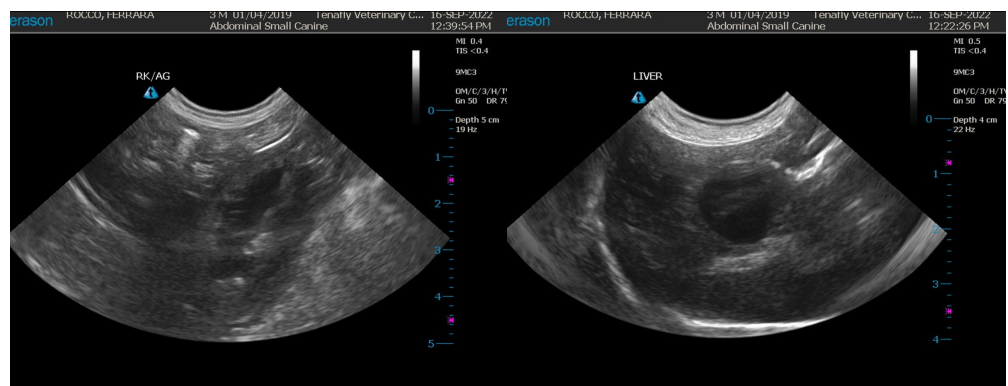
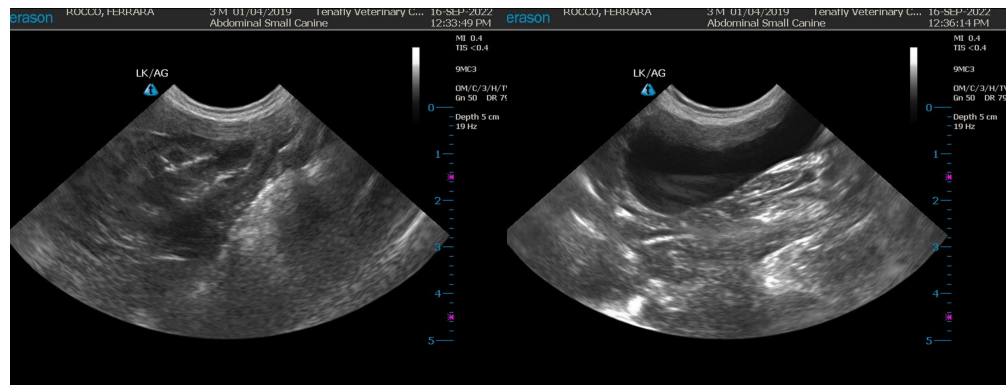
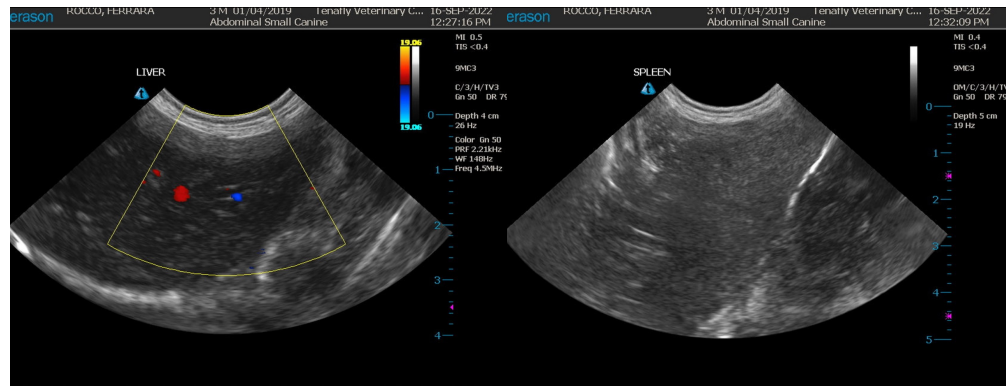
Dr. Han

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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.

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