



**PATIENT**

Nutmeg Coleman

**PRESENTING CLINICAL SIGNS**

LIVER DZ ALT 2 WEEKS AGO 384, BILE ACIDS 230 /120 PRE/POST PLACED ON EN DIET TODAY ALT=184 LEPTO NEGATIVE PLAN--REPEAT BILE ACIDS IN 2 WEEKS

**SPECIES**

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

**BREED**

Cockapoo

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 were noted. Ureteral papillae were normal.

**SEX**

Spayed Female

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. The right kidney measured 4.75 cm. The left kidney measured 4.76 cm.

**AGE**

5 Years

**Adrenal Glands**

**WEIGHT**

23 Pounds

The **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 0.40 cm. The right adrenal gland measured 0.60 cm.

**Spleen**

**INTERPRETED BY**

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 were noted.

**IMAGING PERFORMED BY**

Dr. Barnea

**Liver**

The **liver** was subjectively normal to slightly subnormal in size and was structurally unremarkable with slight increased portal markings. Minor gallbladder debris and a slight amount of sand noted.

**HOSPITAL NAME**

Tenafly Vet Center

**Gastrointestinal**

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.

**REFERRING VET**

Dr. Barnea

**Pancreas**

**INVOICE**

42056

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.

**ULTRASONOGRAPHIC FINDINGS**

**DATE**

10/13/22

- Non-specific hepatic presentation, slight subnormal size and minor remodeling



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**DATE**

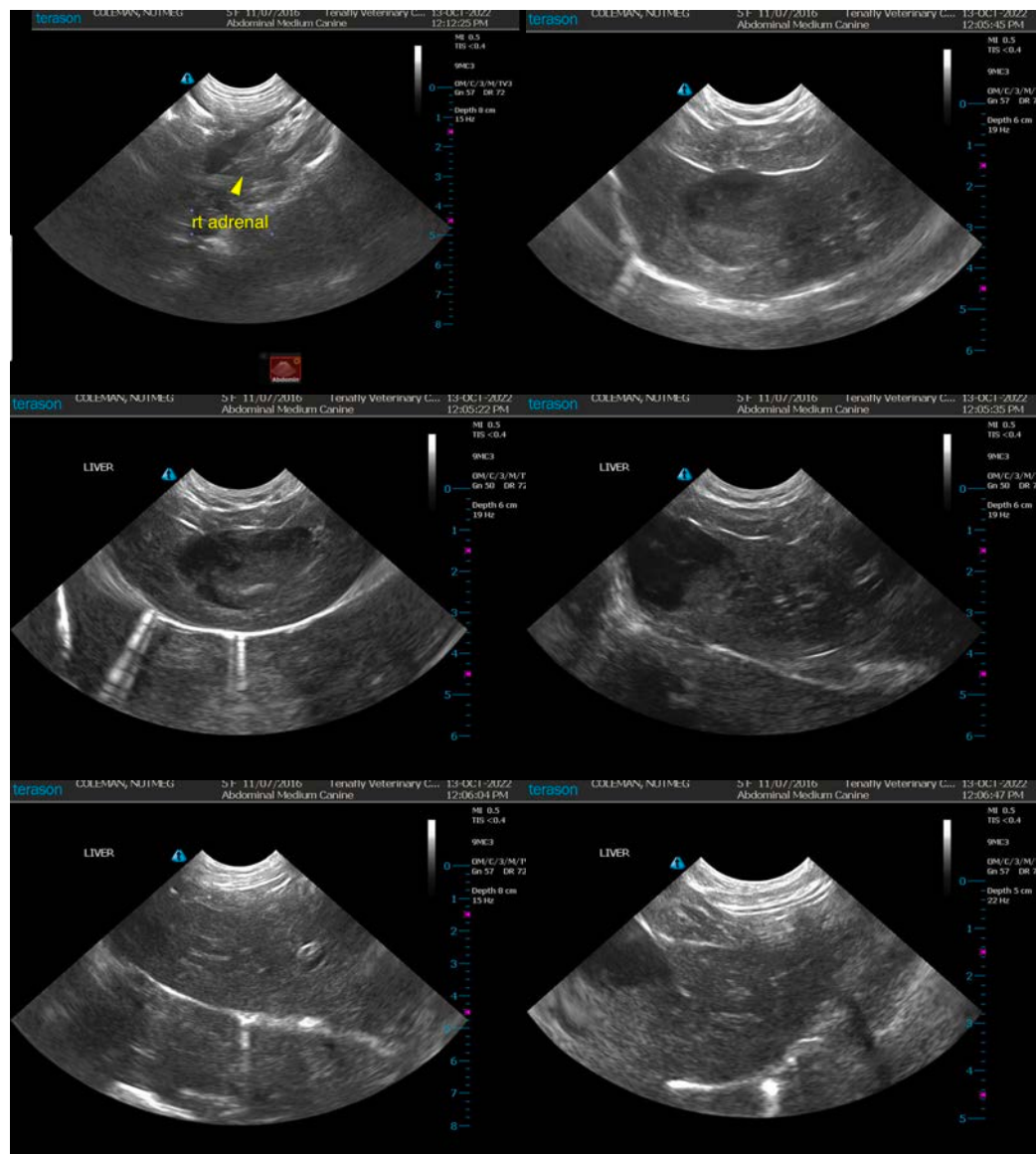
10/13/22

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

No overt portosystemic shunting yet cannot be completely ruled out. Core biopsy would be necessary for further definition +/- abdominal CT with contrast to completely rule out potential for portosystemic shunting, though not suspected.

**Hepatic Support for Bile Acid Elevation +/- Hepatic Encephalopathy**

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.





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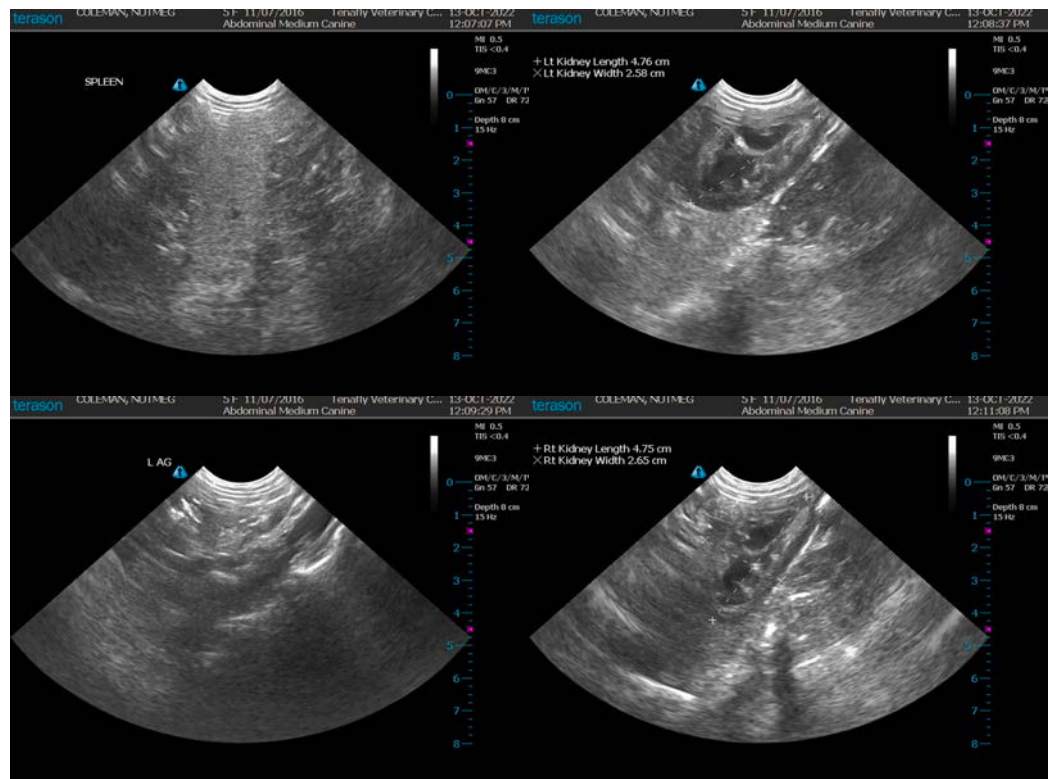
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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

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