



PATIENT PRESENTING CLINICAL SIGNS

Tuffy Woehl

History: Patient has had elevated liver enzymes that continue to trend upward even with Denamarin. Patient is happy and acts normal with great appetite. Subjectively PU/PD but LDDS test was Not indicative of cushings.

SPECIES

Abnormal PE/Chem/CBC/UA Results: ALT 538, ALP 1595, GGT 35 Hypothyroid

Canine

BREED

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

Cocker Spaniel

The **bladder** in this patient was mildly thickened with slight echogenic mural changes. No calculi or masses were noted. Slight micropolypoid changes were noted. This is a frequent finding in older animals and may be linked to a history of chronic urinary tract infection or active urinary tract infection. Urinalysis would be recommended with culture if any evidence of inflammatory sediment is present. The region of the trigone and visible pelvic urethra were normal.

SEX

Neutered male

The residual prostate measured 0.5 cm.

AGE

15 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 this age patient. Medullary structure differed distinctly from that of the cortex and no evidence of pelvic dilation was present. The left and right kidney measured 5.0 cm.

WEIGHT

20 lbs

INTERPRETED BY

Adrenal Glands

Eric Lindquist, DMV
DABVP, Cert. IVUSS

The left **adrenal gland** was 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 0.6 cm. The right adrenal gland was visualized obliquely and was slightly heterogenous and slightly irregular measuring approximately 1.0 cm.

IMAGING PERFORMED BY

Dr. Gotfredson

Spleen

HOSPITAL NAME

Red Hills VH

The **spleen** revealed multi-focal, hypoechoic, non-disruptive nodular changes. The contour was swollen.

REFERRING VET

Liver

Dr. Woehl

The **liver** revealed fairly uniform enlargement and multi-focal, hypoechoic nodular changes. Some of the nodular changes in the liver are somewhat disruptive. Increased portal markings were noted. The gallbladder and common bile duct were unremarkable.

INVOICE

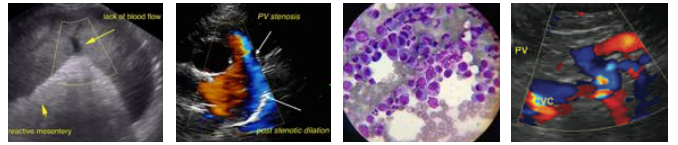
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Gastrointestinal

DATE

10/20/21

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



PATIENT

demonstrated normal luminal chyme and stool consistency respectively. No obstructive or overt infiltrative disease was noted. No associated abnormal lymphatic activity was noted.

Tuffy Woehl

SPECIES

Pancreas

Canine

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.

BREED

Cocker Spaniel

ULTRASONOGRAPHIC FINDINGS

SEX

Hypoechoic, multi-focal nodular splenic changes.

Neutered male

Enlarged liver with hypoechoic nodular changes.

AGE

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

15 years

I recommend ultrasound-guided FNA of the general hepatic parenchyma and hypoechoic nodules. Bile acid profile is warranted as well or core liver biopsy would be ideal. Micronodular hyperplasia is likely the cause of the splenic changes. However, FNA is also indicated. If any crusting skin lesions are present in this patient then some aspects of the liver presentation could be related to hepatocutaneous syndrome. Neoplasia is unlikely, but a mild potential.

WEIGHT

20 lbs

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Dr. Gotfredson

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PATIENT

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SPECIES

Canine

BREED

Cocker Spaniel

SEX

Neutered male

AGE

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WEIGHT

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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.

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