



PATIENT PRESENTING CLINICAL SIGNS

PATIENT
Nugget Nyborg

SPECIES
Canine

BREED
Havanese

SEX
Neutered male

AGE
9 years

WEIGHT
9.5 kg

INTERPRETED BY
Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY
Dr. Massa

HOSPITAL NAME
Animal Emergency
Hospital Volusia

REFERRING VET
Dr. Massa

INVOICE
30379

DATE
5/14/22

O states p has hx of reverse sneezing. O states p couldn't stop sneezing. P been vomiting and has not eaten for the past few days; No diarrhea noted, constant reverse sneezing/hacking. Another rDVM was concerned for bronchitis and started Clavamox and Temaril-P which did not seem to help
 Abnormal PE/Chem/CBC/UA Results: EPOC: elevated lactate Chem: ALP 258 (0-140), GGT 24 (0-14), Tbili 0.9 (0-0.5), Alb 4.2 (0-4.0) CPLi: normal Radiograph conclusion: "1. Mild diffuse bronchointerstitial pulmonary pattern. This is a nonspecific finding with a broad differential list. Differentials include chronic bronchitis (allergic, bacterial, viral, parasitic), age-related pulmonary fibrosis, acute infectious tracheobronchitis, or less likely eosinophilic bronchopneumopathy. Airway sampling, fecal examination, heartworm testing, and empirical therapy may be considered as clinically indicated. 2. Otherwise unremarkable thorax. There is no evidence of cardiomegaly or pulmonary metastatic disease. 3. No evidence of mechanical obstruction of the small bowel or foreign material. Gastroenteritis (dietary indiscretion, infectious, inflammatory, or toxin) remains possible. Repeat radiographs following an 8-12-hour fast with fluid therapy could be considered for reevaluation, if clinically indicated. 4. Mild hepatomegaly. Differentials include vacuolar hepatopathy, hepatitis, or neoplasia. Correlate to hepatic enzyme evaluation. An abdominal ultrasound may be considered for further evaluation."

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The **urinary bladder** and visible pelvic urethra were unremarkable for the level of repletion presented. The urine, however, did present some mildly echogenic debris consistent with mucous, exfoliated cells from renal or bladder origin, and/or blood clots as these echogenic changes can all present similarly. This is often related to urinary tract infection but may represent simple evidence of exfoliated debris or sterile inflammation. Cystocentesis, urinalysis, +/- culture would be recommended to rule out and define any UTI.

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. Trace pyelectasia was noted in the right kidney. The kidneys each measured 5.0 cm with slight pinpoint mineralization noted.

Adrenal Glands

The **adrenal glands** were not visualized.

Spleen

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.



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Liver

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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. 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.

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Gastrointestinal

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Neutered male

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.

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Pancreas

WEIGHT

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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.

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ULTRASONOGRAPHIC FINDINGS

Structurally unremarkable abdomen.

Empty GI tract.

Non-specific, subjectively benign hepatopathy.

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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

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Urinary work-up is warranted to assess for any evidence of UTI. If the bilirubin elevation is persistent then FNA is indicated. However, assessment for lab error is warranted as there is no structural justification for the bilirubin elevation. Supportive care should prove effective.

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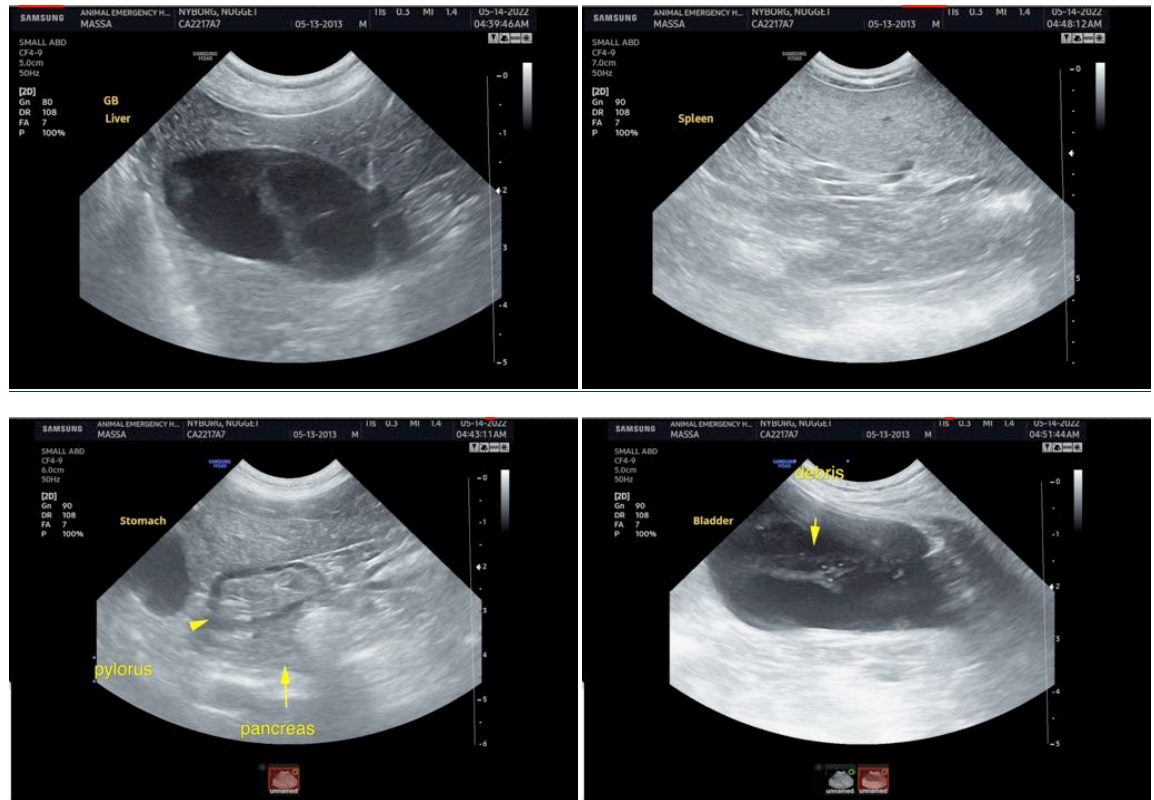
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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