



**PATIENT PRESENTING CLINICAL SIGNS**

**Patient:** Fern Fisher  
**Species:** Canine  
**History:** urinary incontinence, arthritis of both carpuses, slow moving  
**Current Medications:** Gabapentin 100mg 5:00 pm yesterday  
**Radiographic Findings:** CHEST RADS-SPONDLOSIS T2-3, HEART LUNGS WNL  
**Primary Question/Differential to Be Answered in This Exam:** CAUSE FOR CBC/HEPATIC CHANGES  
**Abnormal PE/Chem/CBC/UA Results:** cbc-2 nrbc, decreased platelets, increased bands chem-increase AST, ALT, ALKP, t. bili T4-wnl UA- Spg 1.011, 1+ PROTEIN, C/S NO GROWTH

**BREED ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Breed:** Cocker Poo  
**System:** *Urinary System*

**Sex:** Spayed Female  
The **urinary bladder** and trigone presented normal thicknesses and normal tone. The urethra was slightly thickened and measured 0.4 cm and was imaged 2.0 cm caudal to the cystourethral junction. The pelvic urethra was imaged 3.0 cm beyond the cystourethral junction. The ureters were not visible which is normal. No uroliths or sediment were visualized and anechoic urine was present.

**Age:** 11 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 kidney measured 5.93 cm.

**Weight:** 24.4 lbs  
**System:** *Adrenal Glands*

**Interpreted by:** Eric Lindquist, DMV, DABVP, Cert. IVUSS  
The **adrenal glands** appeared slightly enlarged and swollen. No evidence of focal capsular expansion or invasion into the phrenic veins was noted. No overt suspicion of neoplasia was noted. This is considered likely a hyperplastic change associated with stress or adrenal endocrinopathy (PDH). If isosthenuria is persistently present and the patient morphologically suggests Cushing's disease then ACTH testing would be indicated. The right adrenal gland measured 2.16 x 1.12 cm at the cranial pole and 0.72 cm at the caudal pole. The left adrenal gland measured 2.2 x 0.75 cm at the cranial pole and 0.63 cm at the caudal pole.

**Imaging Performed by:** Jenna Walsh, CVT

**Hospital Name:** Edgewood AC  
**System:** *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.

**Referring Vet:** Dr. Callahan

**Date:** 2/25/22  
**System:** *Liver*  
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

**Invoice**



**PATIENT**

Fern Fisher

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.

**SPECIES**

Canine

**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.

**BREED**

Cocker Poo

**Pancreas**

**SEX**

Spayed Female

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.

**AGE**

11 years

**Free Abdomen**

The iliac lymph nodes were slightly enlarged. The left iliac lymph node measured 1.5 x 1.0 cm.

**WEIGHT**

24.4 lbs

**ULTRASONOGRAPHIC FINDINGS**

Chronic pancreatic changes.

**INTERPRETED BY**

Eric Lindquist, DMV,  
DABVP, Cert. IVUSS

Minor urethral thickening and slight iliac lymphadenopathy.

Geriatric abdomen with mild bilateral adrenal enlargement.

**IMAGING PERFORMED BY**

Jenna Walsh, CVT

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Cystoscopy would be ideal in this patient to obtain biopsies of the pelvic urethra. Ultrasound-guided FNA of the iliac lymph nodes are warranted. If the bilirubin elevation is not artifactual then FNA of the liver is indicated. This appears to be subjectively benign. However, acute insult as Leptospirosis or occult neoplasia is possible, yet not evident. If the urine specific gravity remains then 1.020 then work-up for PDH/Cushing's is indicated. Sedation and FNA of the iliac lymph nodes and liver are indicated.

**HOSPITAL NAME**

Edgewood AC

Subxiphoid palpation is recommended to assess for pain-solicited response. If pain is noted low grade pancreatitis is suspected.

**REFERRING VET**

Dr. Callahan

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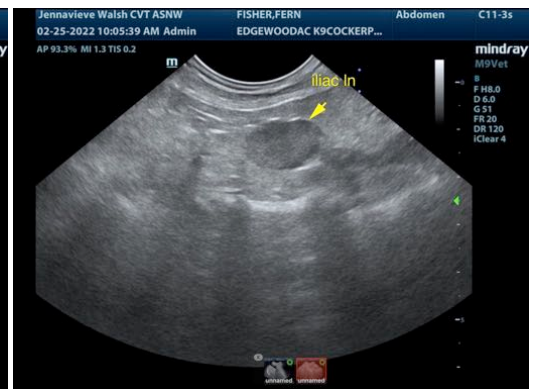
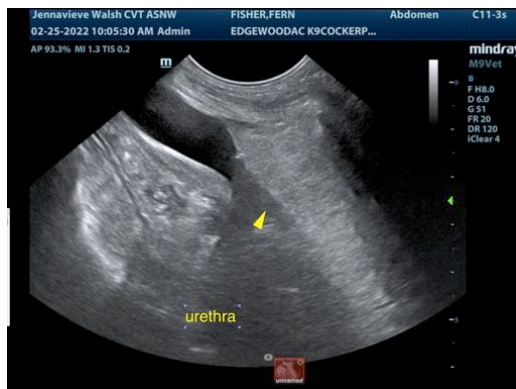
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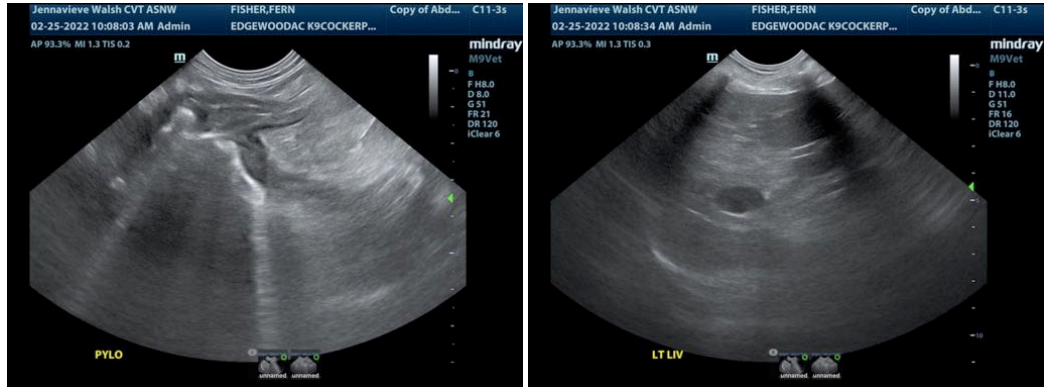
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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