



**PATIENT**

Mina Engel

**PRESENTING CLINICAL SIGNS**

Respiratory distress with abnormal effort-PE vs Mass vs other. Became cyanotic during chest rads. Current meds: Lasix 0.3cc IM (O2 for scan, added Torb for abdomen and thora id centesis)

**SPECIES**

Feline

Abnormal PE/Chem/CBC/UA Results: Pending

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART & ABDOMEN**

**BREED**

DSH

**SEX**

Spayed Female

**AGE**

9.5 Years

**WEIGHT**

12.13 Pounds

| FELINE CARDIAC PARAMETERS | BODY WEIGHT (kg) | HR (BPM)                  | IVSd (cm)  | LVIDd (cm) | LVWd (cm)       | FS (%)          | EF (%)    |
|---------------------------|------------------|---------------------------|--|------------|-----------------|-----------------|-----------|
| NORMAL PARAMETER          | -----            | 150-240                   | 0.3-0.6  | 1.0-2.1    | 0.25-0.6        | 35-67           | 80-100    |
| PATIENT                   |                  | NM                        | 0.5  | 1.2        | 0.5             | 35              |           |
| FELINE CARDIAC PARAMETERS | LA/AO (Boon)     | LA/AO HEART BASE (Sisson) | LA 2D 4-chamber long axis AS to FW (Sisson) (cm) |            | LVOT VEL. (m/s) | RVOT VEL. (m/s) | IVRT (m/) |
| NORMAL PARAMETER          | <1.5             | 0.88-1.79                 | 0.7-1.7  |            | <1.6            | <1.3            | 40-60     |
| PATIENT                   | 1.15             |                           |  |            |                 |                 | NM        |

Adapted from June Boon, Veterinary Echocardiography, 1998  
Sisson D et al. JVIM 1991; 5: 232, Jacobs et al. Am J Vet Res 1985; 46:1705

**INTERPRETED BY**

Eric Lindquist, DMV

DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Shari Reffi, CVT

**HOSPITAL NAME**

ACC Flanders

**REFERRING VET**

Dr. Hallihan

**INVOICE**

42740

**DATE**

11/11/22

**Cardiac Presentation**

The cardiac presentation revealed normal chamber size and structure. No evidence of primary cardiac disease noted. However, a moderate amount of pleural effusion was present. Areas of tissue consolidation noted in the thorax.

**Urinary System**

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.

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 his age patient. Medullary structure differed distinctly from that of the cortex. The right kidney measured 4.43 cm. The left kidney measured 4.5 cm. Slight pyelectasia noted in the kidneys.

**Adrenal Glands**

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. The left adrenal gland measured 0.35 cm. The right adrenal gland measured 0.36 cm.



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**Spleen**

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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.

**BREED**

DSH

**Liver**

**SEX**

Spayed Female

The **liver** images submitted revealed subjectively normal liver size, contour, and structure. Parenchymal echogenicity was naturally coarse and hypoechoic to the spleen. Vascular and biliary tracts were of normal volume with no evidence of congestion. 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.

**AGE**

9.5 Years

**Gastrointestinal**

**WEIGHT**

12.13 Pounds

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.

**Pancreas**

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**

- Normal abdomen
- Non-cardiogenic pleural effusion

DABVP, Cert. IVUSS

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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Strong concern for neoplasia. Pleuritis and pneumonia possible. Chest CT indicated for further definition.

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**ABOUT SONOPATH CT SERVICES:**

**REFERRING VET**

Dr. Hallihan

**SonoPath CT Services** are offered at the SonoPath Imaging and Veterinary Education Center, 141 Main St (rt 206), Andover, New Jersey, a 20-minute drive west on route 80/206 North from the route 80/287 interchange/Parsippany, New Jersey. More information can be found at

<https://sonopath.com/services/sonopath-ct-services>

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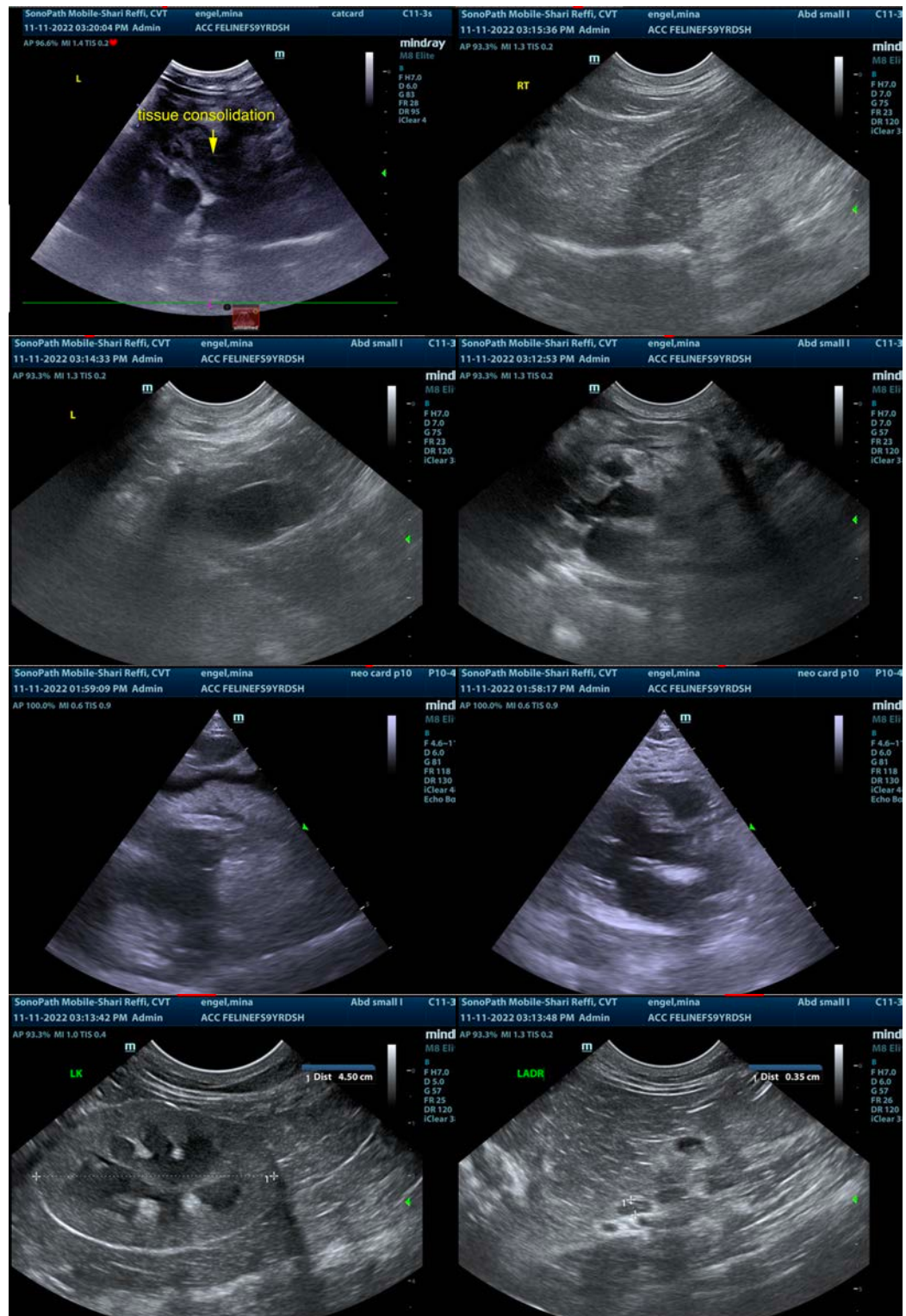
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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