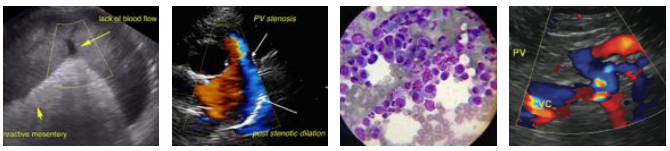
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™




SonoPath.com
1-800-838-4268 info@sonopath.com

**PATIENT**
Tiny Stoltz

**SPECIES**
Canine

**BREED**
Jack Russell Terrier

**SEX**
Neutered male

**AGE**
13 years

**WEIGHT**
12 lbs

**INTERPRETED BY**
Eric Lindquist, DMV DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**
Diane McFadden, RVT

**HOSPITAL NAME**
Animal Care Center of Flanders

**REFERRING VET**
Dr. Halliban

**INVOICE**
32047

**DATE**
7/21/22

## PRESENTING CLINICAL SIGNS

History: Episode of respiratory distress last week; grade 1/6 systolic murmur; VHS 13 on rad, lungs clear. Necrotic abscess/wound on head 9 days after initial presentation. Now regurgitating , anorexic, wound dehiscing. On doxycycline 30 mg bid (discontinued due to vomiting and anorexia); convenia inj on 7/25/22.
Abnormal PE/Chem/CBC/UA Results: lyme positive. Culture of abscess pending - heavy growth of gram pos bacteria. UA: UPC increased 1.0, protein 3+, USPG 1.031

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### *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 was noted. Ureteral papillae were normal.

The **kidneys** presented a relatively uniform cortical hyperechogenicity when compared to the renal medulla, spleen and liver. No overt masses were noted. Corticomedullary definition was nebulous and the ratio favored the cortex slightly. The ureters were not visible and assumed to be normal. These changes are most consistent with chronic interstitial nephritis yet infiltrative disease could not be entirely ruled out without biopsy though neoplasia is not suspected. The right kidney measured 4.8 cm and the left kidney measured 4.5 cm.

### *Adrenal Glands*

The right **adrenal gland** was uniform and measured 1.65 x 0.5 cm at the caudal pole and 0.84 cm at the cranial pole. The left adrenal gland were at the upper limits of normal measuring 1.42 x 0.7 cm at the cranial pole and 0.59 cm at the caudal pole.

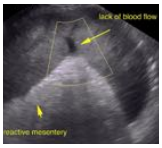
### *Spleen*

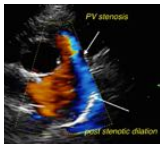
The **spleen** presented a smooth homogeneous parenchyma hyperechoic to liver and renal cortical parenchyma. The capsule was smooth without noticeable expansion or deviation from within the spleen or adjacent pathology. The splenic vasculature demonstrated normal volume without signs of congestion or thrombosis. No sonographic evidence of acute or chronic inflammatory, neoplastic, or infarctual changes was noted.

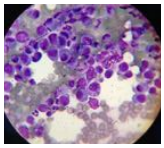
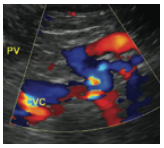
### *Liver*

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.

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™






SonoPath.com
1-800-838-4268 info@sonopath.com

**PATIENT**

Tiny Stoltz

**SPECIES**

Canine

**BREED**

Jack Russell Terrier

**SEX**

Neutered male

**AGE**

13 years

**WEIGHT**

12 lbs

**INTERPRETED BY**

Eric Lindquist, DMV DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Diane McFadden, RVT

**HOSPITAL NAME**

Animal Care Center of Flanders

**REFERRING VET**

Dr. Halliban

**INVOICE**

32047

**DATE**

7/21/22

### *Gastrointestinal*

The **stomach** was over distended with fluid. The gastric wall was unremarkable. The pylorus was patent. The small intestines and colon were unremarkable.

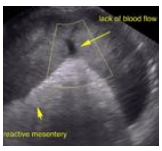
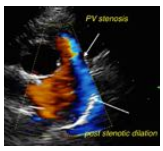
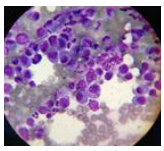
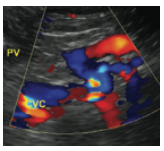
### *Pancreas*

Diffuse hyperechoic changes were present in the area of the **pancreas**. The pancreatic remodeling was evident with multifocal to diffuse hyperechoic changes. The right limb of the pancreas was hyperechoic, heterogenous and irregular.

## ULTRASONOGRAPHIC EXAMINATION OF THE HEART

The echocardiogram in this patient demonstrated normal **left atrial** size based on 3 different LA measurement methods. Chamber volumes and echogenicity were normal. The cranial and caudal **mitral** valve leaflets presented vegetative thickening consistent with endocardiosis. Doppler indicated measurable insufficiency. The **left ventricle** presented mild concentric hypertrophy, exact cause is unclear and possibly related to hypertension. The **myocardium** presented normal echogenicity without subjective evidence of significant fibrotic or ischemic disease. **Contractility** of the ventricular walls was adequate and in normal range for this patient evidenced by the fractional shortening measurement and subjective evaluation of the different regions of the myocardium. The **left ventricular outflow** tract demonstrated normal laminar flow and subjective structural integrity. The **right atrium** and auricle revealed normal size, structure and content. No evidence of masses was noted or chamber overload. **Tricuspid** valvular assessment demonstrated adequate linear morphology. The **right ventricle** was of normal size (1/3 diameter of LV), chordae structure, myocardial echogenicity and thickness. **Pulmonic** tract assessment revealed normal valve structure, laminar flow, and diameter (approx.1:1 pa/ao ratio). No visible **pericardial** or free pleura fluid was noted. No echographically detectable evidence of infiltrative disease was visible. The cranial **mediastinum and pericardial regions** were free of masses in the visible window.

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

SonoPath.com
1-800-838-4268 info@sonopath.com

**PATIENT**

Tiny Stoltz

**SPECIES**

Canine

**BREED**

Jack Russell Terrier

**SEX**

Neutered male

**AGE**

13 years

**WEIGHT**

12 lbs

**INTERPRETED BY**

Eric Lindquist, DMV DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Diane McFadden, RVT

**HOSPITAL NAME**

Animal Care Center of Flanders

**REFERRING VET**

Dr. Halliban

**INVOICE**

32047

**DATE**

7/21/22

| CANINE CARDIAC PARAMETERS | MR VMAX (m/s) | TR VMAX (m/s) | LA/AO (Boon method) | LA/AO (Heart Base; Swe) | FS (%) | EF (%) | EPSS (cm) |
|---|---|---|---|---|---|---|---|
| NORMAL PARAMETER | 4.5-5.5 | <2.7 | 1.3 | <1.6 | 28-40 | 40-100 | <0.6 |
| PATIENT | | | 1.2 | 1.3 | 50 | 90 | 0.1 |
| **CANINE CARDIAC PARAMETERS** | **HR** (BPM) | **AV VMAX** (m/s) | **PV MAX** (m/s) | **BODY WEIGHT** | **LA** 2D short axis Base view (cm) | **LVIDd** Avg; 2D and m-mode short axis (cm) | **LVIDs** Avg; 2D and m-mode short axis (cm) |
| NORMAL PARAMETER | 50-100 | 0.7-1.7 | 0.7-1.6 | BELOW | BELOW | BELOW | BELOW |
| PATIENT | | 1.18 | | 12 lbs | | 1.9 | |

## ULTRASONOGRAPHIC FINDINGS

Pancreatic remodeling, possibly concurrent inflammation.

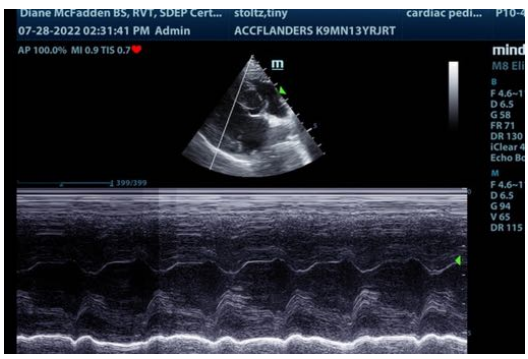
Gastritis pattern with likely reflux issues.

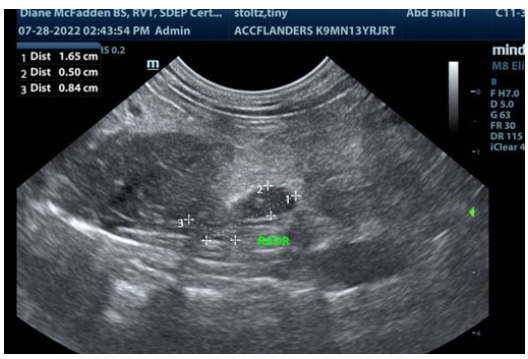
Chronic interstitial nephrosis pattern.

Left ventricular concentric hypertrophy possibly related to underlying hypertension.

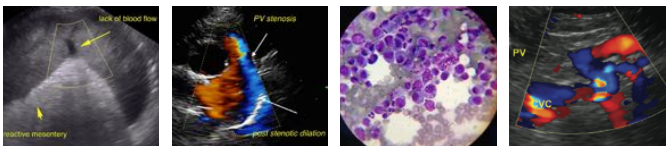
## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There was no evidence of clinical cardiac disease. Blood pressure measurements are warranted. If the systolic pressure is greater than 160 then ace inhibitor therapy is indicated. This is likely a flow murmur. There was no overt valvular insufficiency noted. Endoscopy would be ideal. IV fluid support, 24 hour n.p.o. and GI protectant protocol is indicated. Recheck sonogram is recommended in 7-10 days or earlier if clinical decline occurs.



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



SonoPath.com
1-800-838-4268 info@sonopath.com

**PATIENT**

Tiny Stoltz

**SPECIES**

Canine

**BREED**

Jack Russell Terrier

**SEX**

Neutered male

**AGE**

13 years

**WEIGHT**

12 lbs

**INTERPRETED BY**

Eric Lindquist, DMV
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Diane McFadden, RVT

**HOSPITAL NAME**

Animal Care Center of Flanders

**REFERRING VET**

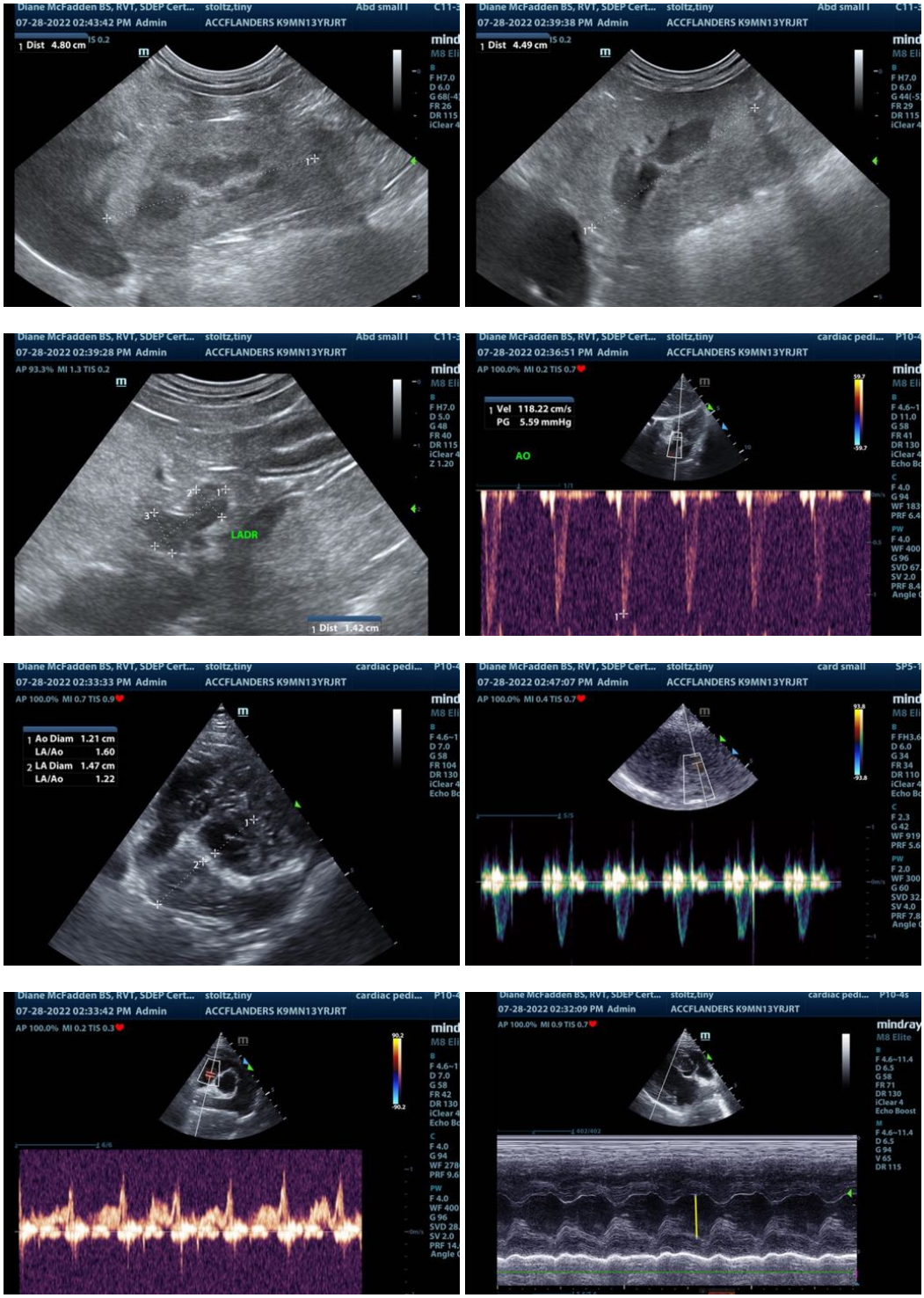
Dr. Halliban

**INVOICE**

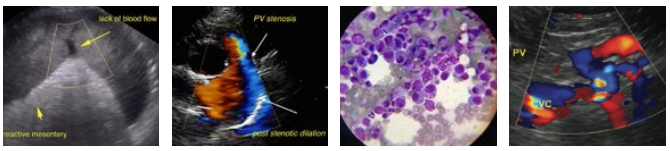
32047

**DATE**

7/21/22



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



SonoPath.com
1-800-838-4268 info@sonopath.com

**PATIENT**

Tiny Stoltz

**SPECIES**

Canine

**BREED**

Jack Russell Terrier

**SEX**

Neutered male

**AGE**

13 years

**WEIGHT**

12 lbs

**INTERPRETED BY**

Eric Lindquist, DMV DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Diane McFadden, RVT

**HOSPITAL NAME**

Animal Care Center of Flanders

**REFERRING VET**

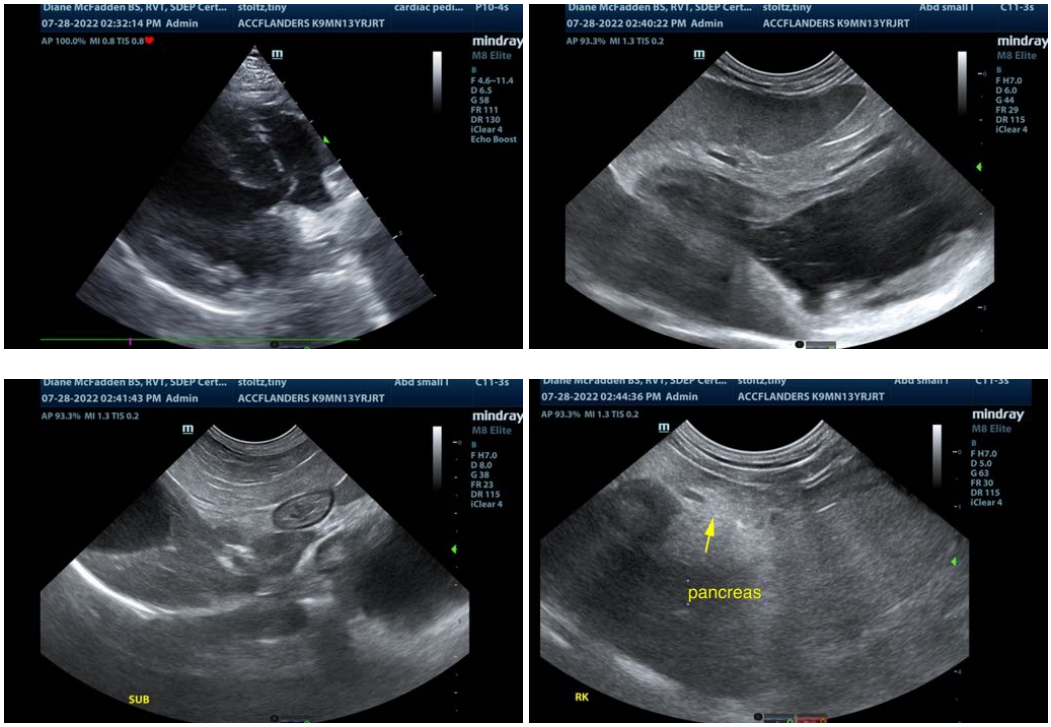
Dr. Halliban

**INVOICE**

32047

**DATE**

7/21/22




**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
Info@SonoPath.com