



PATIENT

Zoey Pisano

PRESENTING CLINICAL SIGNS

Abdominal effusion, no urination for one week per O. Bladder small on spot probe. No current meds. Abnormal PE/Chem/CBC/UA Results: glucose 165 I130H, Cr 1.3 (1.8 H), K 4.4 (5.3 H). Abdominal effusion Cr 1.2, K 4.3

SPECIES

Feline

ULTRASONOGRAPHIC EXAMINATION OF THE HEART & ABDOMEN

BREED

DSH

SEX

Spayed Female

AGE

13 Years

WEIGHT

10 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 | | 205 | 0.3 | 1.37 | 0.38 | 50 | 84 |
| 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 | 1.36 | 1.33 | 1.2 | 1.0 | 0.85 | 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

Newton Vet Hospital

REFERRING VET

Dr. Kim

INVOICE

40202

DATE

8/5/22

Cardiac Presentation

The echocardiogram in this patient demonstrated normal **left atrial** size based on 3 separate LA measurements. The cranial and caudal **mitral** valve leaflets presented normal linear structure and kinetics. The **left ventricle** presented normal thicknesses with linear contour and was not dilated nor restricted. 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 and angles 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 and kinetics. 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 or extra cardiac pathology in the visible planes. The cranial **mediastinum** and **pericardial regions** were free of masses in the visible window.

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** presented an interstitial nephrosis pattern with idiopathic hyperechoic medullary rim sign. Moderate degenerative changes noted. The right kidney was subnormal in size at 2.79 cm with cortical collapse at the caudal pole. Blood flow to the kidneys was subnormal on power doppler assessment.



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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 0.50 cm. The right adrenal gland measured 0.58 cm.

Spleen

The **spleen** in this patient was uniform, yet volume contracted. Hydration status should be assessed.

Liver

The **liver** was slightly heterogeneous with increased portal markings. The gallbladder and common bile duct were unremarkable.

Gastrointestinal

The **gastrointestinal tract** was largely unremarkable, yet was enveloped by the pancreatic pathology.

Pancreas

The **pancreas** revealed coalescing omentum and nodular changes around the pancreatic region.

Free Abdomen

Large amount of echogenic free fluid noted.

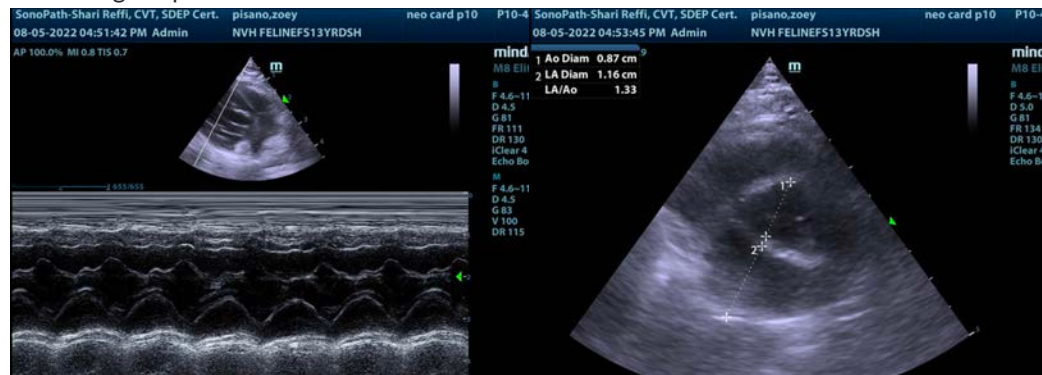
ULTRASONOGRAPHIC FINDINGS

- Normal echocardiogram
- Nodular pancreas with coalescing omentum
- Large amount of echogenic free fluid
- Interstitial nephrosis renal pattern
- Volume contracted spleen
- Heterogeneous liver

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No evidence of thoracic cause of the effusion.

Strong suspicion for pancreatic carcinomatosis or similar neoplasia. FIP or peritonitis less likely potential. Abdominocentesis and cytospin of the free fluid recommended to assess for underlying exfoliating neoplasia.





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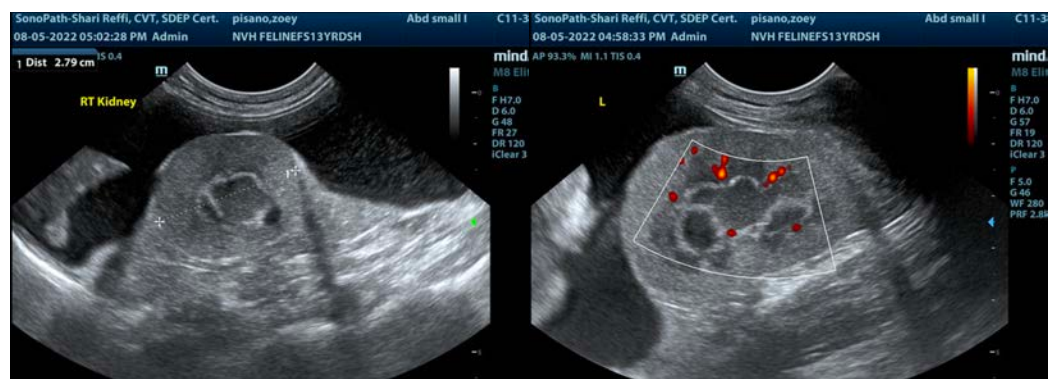
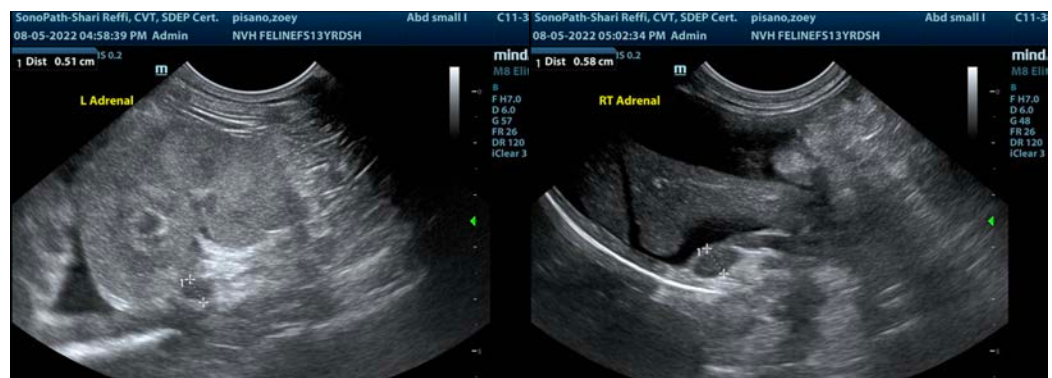
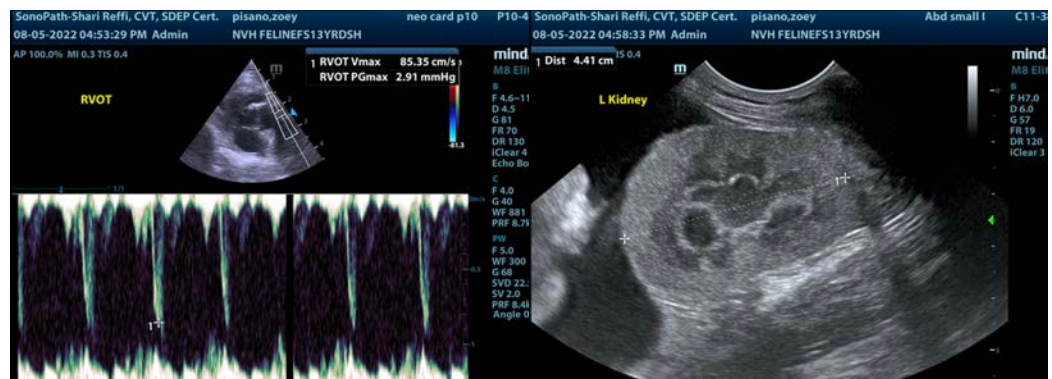
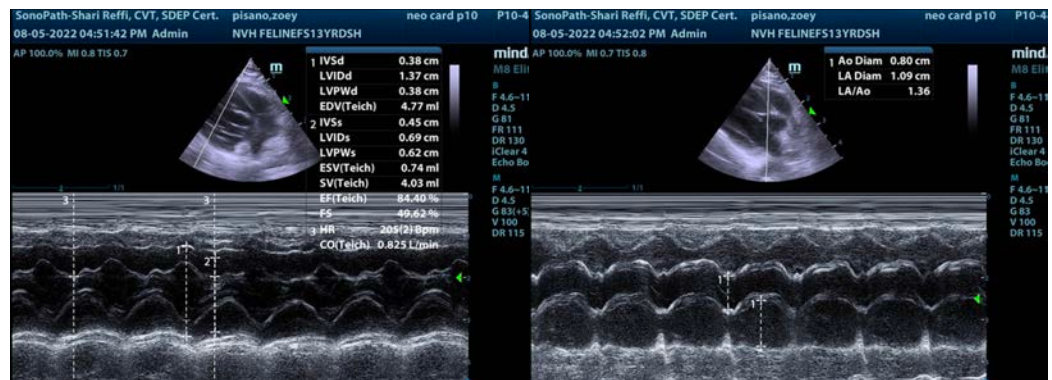
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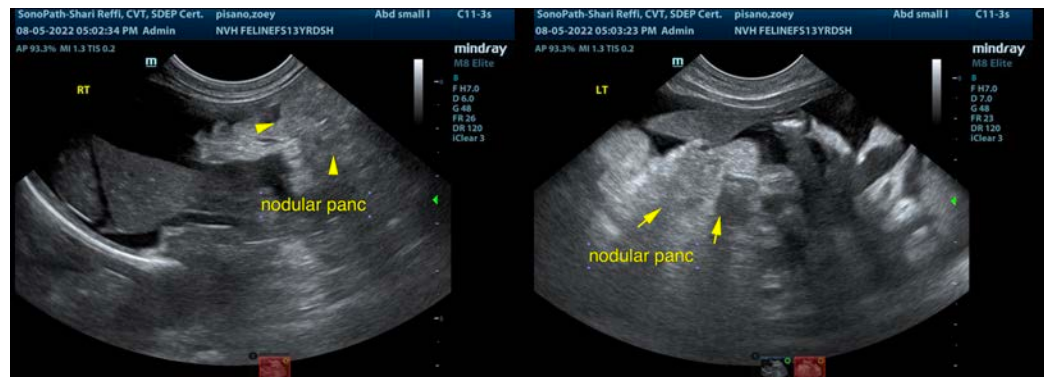
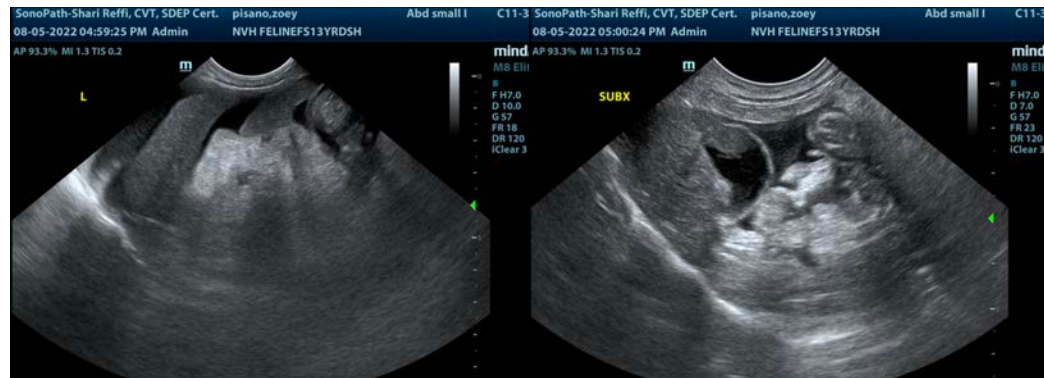
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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