



PATIENT

Lumen Sanchez

SPECIES

Feline

BREED

DMH

SEX

MN

AGE

6 yr

WEIGHT

Not Given

INTERPRETED BY

R. McKenzie Daniel,
DVM, DABVP
(Canine and Feline)

IMAGING PERFORMED BY

Shari Reffi, CVT

HOSPITAL NAME

ACC Flanders

REFERRING VET

Dr. Hallihan

INVOICE

13835

DATE

5/10/22

PRESENTING CLINICAL SIGNS

Grade II/VI systolic murmur, hx of Diabetes In. Current meds: Desmopressin 0.01%-0.1ml sq bid, Gaba 100mg for today only.

Abnormal PE/Chem/CBC/UA Results: Creat 1.6 and positive for renal tech. , Lymphs 52, Alb 4.0, USG 1.004

ULTRASONOGRAPHIC EXAMINATION OF THE HEART & ABDOMEN

| 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 | | 206 | 0.44 | 1.64 | 0.40 | 64.6 | 94 |
| 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 | 1.32 | 1.35 | 1.2 | 1.0 | 0.8 | 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 | | | | | | | |

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, cystourethral junction, and visible pelvic urethra to a depth of 2.0 cm exhibited normal thickness and tone. Primarily anechoic urine was present in the lumen. Mild to



| | |
|--|--|
| PATIENT | moderate, nondependent particulate sediment was present without evidence of calculus formation. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic mural changes were noted. |
| Lumen Sanchez | |
| SPECIES | The area of the aortic trifurcation was free of pathology. |
| Feline | |
| BREED | Normal size and margination were present in the kidneys. Both kidneys exhibited maintained 1:3 cortex / medulla ratio with mild uniform increased cortex echogenicity and secondary mildly enhanced corticomedullary border demarcation. No evidence of pyelectasia was noted. The left kidney measured 4.0 cm in length. The right kidney measured 4.1 cm in length. |
| DMH | |
| SEX | Adrenal Glands |
| MN | The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.34 cm width. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.38 cm width. No evidence of hyperplasia was noted. |
| AGE | |
| 6 yr | |
| WEIGHT | Spleen |
| Not Given | The spleen exhibited a finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. Acute to chronic inflammatory, neoplastic, or benign parenchyma changes were not noted. |
| INTERPRETED BY | Liver/ Gallbladder |
| R. McKenzie Daniel, DVM, DABVP (Canine and Feline) | The liver was subjectively normal in size, structure, and contour. The liver parenchyma was uniform and hypoechoic to the spleen with a mild coarse echotexture. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content. The cystic and common bile ducts were normal. |
| IMAGING PERFORMED BY | Gastrointestinal |
| Shari Reffi, CVT | The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with no signs of ileus, obstruction, or foreign material. |
| HOSPITAL NAME | The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of ileus, obstruction, or foreign material. |
| ACC Flanders | |
| REFERRING VET | Normal visible colon wall layers were present with apparent formed feces in lumen. |
| Dr. Hallihan | |
| INVOICE | Pancreas |
| 13835 | The parenchyma of the left limb, body, and right limb of the pancreas presented isoechoic to the adjacent omental fat. A normal curvilinear capsule contour of the pancreas was present. The visible pancreatic duct was normal. No signs of active inflammation or neoplastic disease were evident. |
| DATE | Free Abdomen |
| 5/10/22 | No overt lymphadenopathy or peritoneal effusion was present. |



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ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Normal echocardiogram with probable benign physiologic / flow murmur
- Mild to moderate urinary bladder sediment
- Bilateral nonspecific mild uniform increased renal cortex echogenicity and enhanced corticomedullary border distinction

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The urinary bladder sediment may indicate cellular debris / protein, crystalline debris with potential for mild mucus.

The mild uniform increased bilateral renal cortex echogenicity is nonspecific and may be a normal patient variant. Potential for early chronic renal changes or nonspecific nephritis could be possible. Full urinary workup including recheck urinalysis, culture and sensitivity, especially if evidence of glucose urea, +/- additional renal staging to include baseline UPC level, if no evidence of significant inflammatory cells, is suggested. A renal or urinary diet, especially if persistent urinary bladder sediment, could be considered.

INTERPRETED BY

R. McKenzie Daniel,
DVM, DABVP
(Canine and Feline)

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Shari Reffi, CVT

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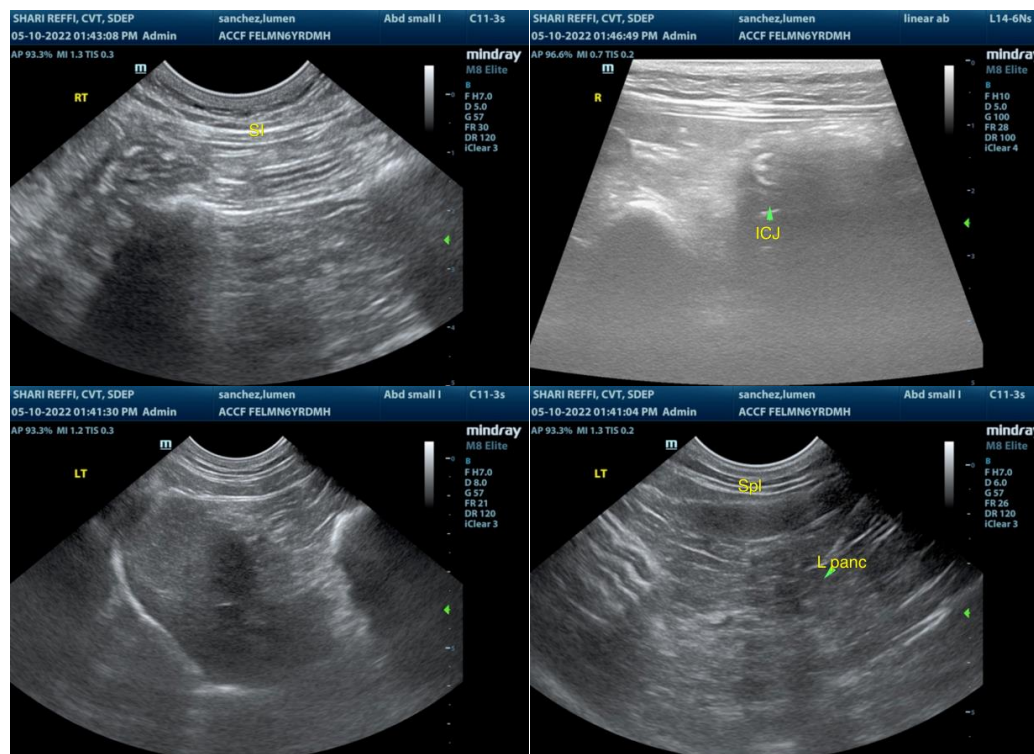
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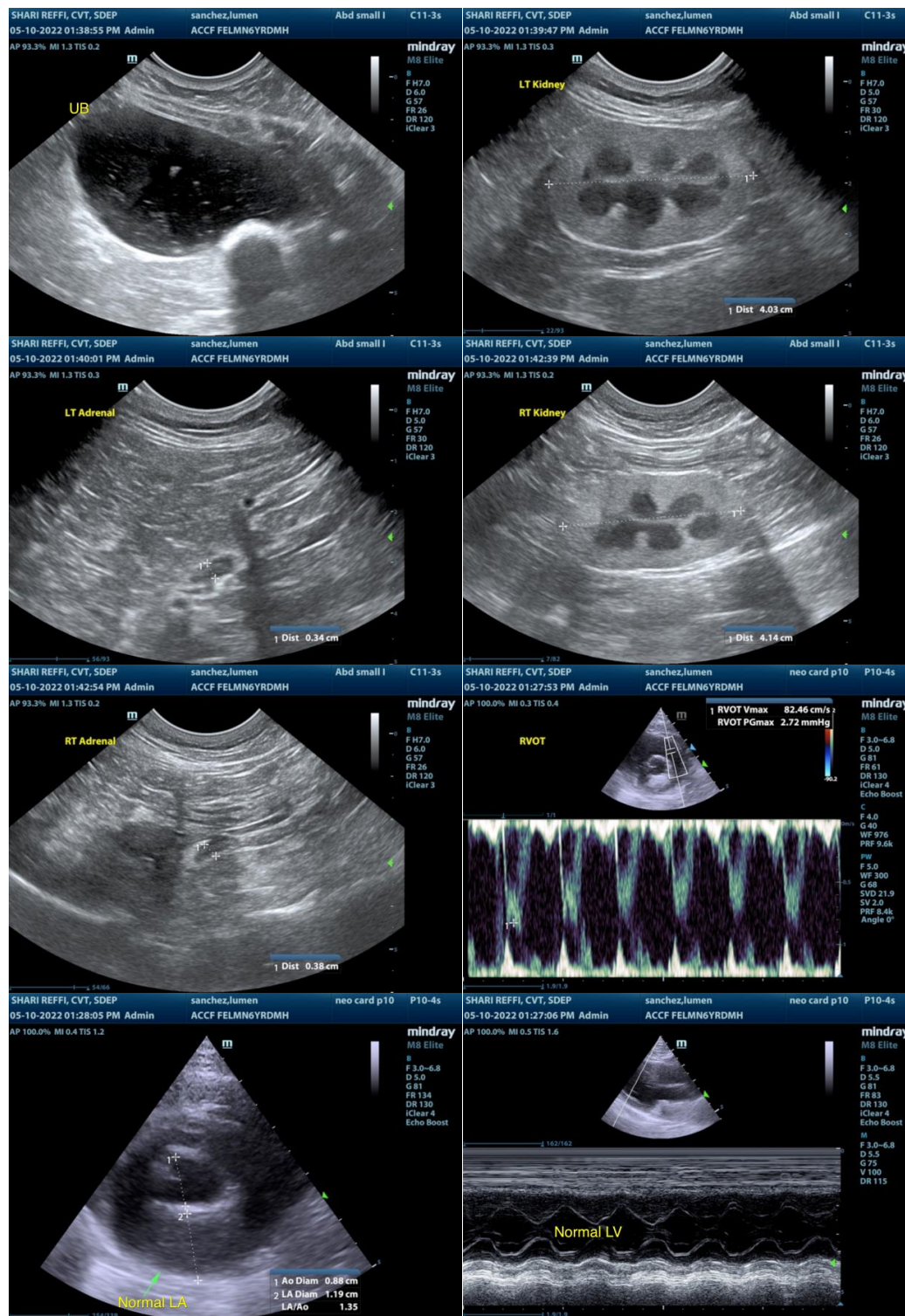
Dr. Hallihan

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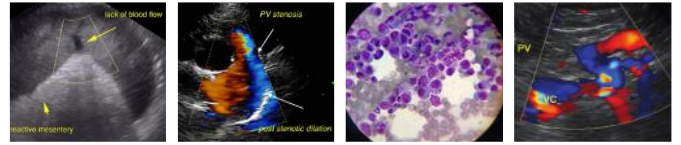
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.



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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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info@SonoPath.com

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