



**PATIENT PRESENTING CLINICAL SIGNS**

**Lucky Harju** new HM Hx CKD that appears to be progressing -new anemia abnormal Cpl vomiting, weight loss CKD diet LRS 2 times a week

**SPECIES** Abnormal PE/Chem/CBC/UA Results: Hematocrit 23.3 Hemoglobin 8.2 RBC 5.05 BUN 72 Creat 3.4 Ca 11.4 ALT 140 Chol 236  
**Feline**

**ULTRASONOGRAPHIC EXAMINATION OF THE HEAT & ABDOMEN**

**BREED**

DSH

**SEX**

Neutered Male

**AGE**

13 Years

**WEIGHT**

6.8 Pounds

FELINE CARDIAC PARAMETERS	BODY WEIGHT (kg)	HR (BPM)	IVSd (cm)	LVIDd (cm)	LVWd (cm)	FS (%)	EF (%)
<b>NORMAL PARAMETER</b>	-----	150-240	0.3-0.6	1.0-2.1	0.25-0.6	35-67	80-100
<b>PATIENT</b>		NM	0.6	1.0	0.6	50	
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/)
<b>NORMAL PARAMETER</b>	<1.5	0.88-1.79	0.7-1.7		<1.6	<1.3	40-60
<b>PATIENT</b>		1.2	1.5				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**

Jenn

**HOSPITAL NAME**

Rockaway AH

**REFERRING VET**

Dr. Ascot

**INVOICE**

42728

**DATE**

11/16/22

**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 pseudohypertrophy owing to volume contraction. 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** insufficiency noted, not clinically significant. 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.



**PATIENT**

Lucky Harju

The **kidneys** presented moderate to near end stage degenerative changes, interstitial nephrosis pattern, cortical collapse, and mineralization with infarcts. The right kidney measured 3.6 cm. The left kidney measured 3.45 cm. Blood flow to the kidneys was subnormal on power doppler assessment.

**SPECIES**

Feline

**Adrenal Glands**

The regions of the **adrenal glands** were unremarkable.

**Spleen**

**BREED**

DSH

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

**Liver**

**SEX**

Neutered Male

The **liver** images from right and left intercostal as well as subcostal views revealed subjectively normal liver size, contour, and structure. Some age-related parenchymal remodeling was noted but likely not clinically significant at this time. Vascular and biliary tracts were of normal volume and no evidence of congestion was noted. The gallbladder presented some dependent debris with essentially normal contour. The cystic and common bile ducts were normal. No overt evidence of active inflammatory, infiltrative or regenerative pathology was noted but should be paired with current or past LE elevations regarding any clinical significance to this presentation. The hepatic lymph nodes were unremarkable.

**AGE**

13 Years

**Gastrointestinal**

**WEIGHT**

6.8 Pounds

There was some residual chyme and gas was noted in the **stomach**, yet not pathological. This is consistent with end post prandial presentation. Transit of chyme into the small intestine was normal. Curvilinear patterns were maintained throughout the GI tract. No evidence of pathology. 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.

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**Pancreas**

DABVP, Cert. IVUSS

The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Some parenchymal remodeling, however, with mild deviation from curvilinear normalcy was observed. Pancreatic duct and capsular irregularities were present consistent with age related changes. If pain upon imaging (+ Murphy sign) was present or if the patient is focally painful in subxyphoid palpation then low-grade smoldering chronic pancreatitis should be suspected.

**IMAGING PERFORMED BY**

Jenn

**ULTRASONOGRAPHIC FINDINGS**

**HOSPITAL NAME**

Rockaway AH

- Unremarkable cardiac presentation
- Geriatric abdomen with subjectively near end stage degenerative renal disease
- Interstitial nephrosis pattern with infarcts and cortical collapse

**REFERRING VET**

Dr. Ascot

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

No evidence of primary cardiac disease.

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Blood pressure measurements warranted. Hydration status should be evaluated. Treatment for acute on chronic renal failure indicated. Prognosis long-term is guarded.

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**HOSPITAL NAME**

Rockway AH

**REFERRING VET**

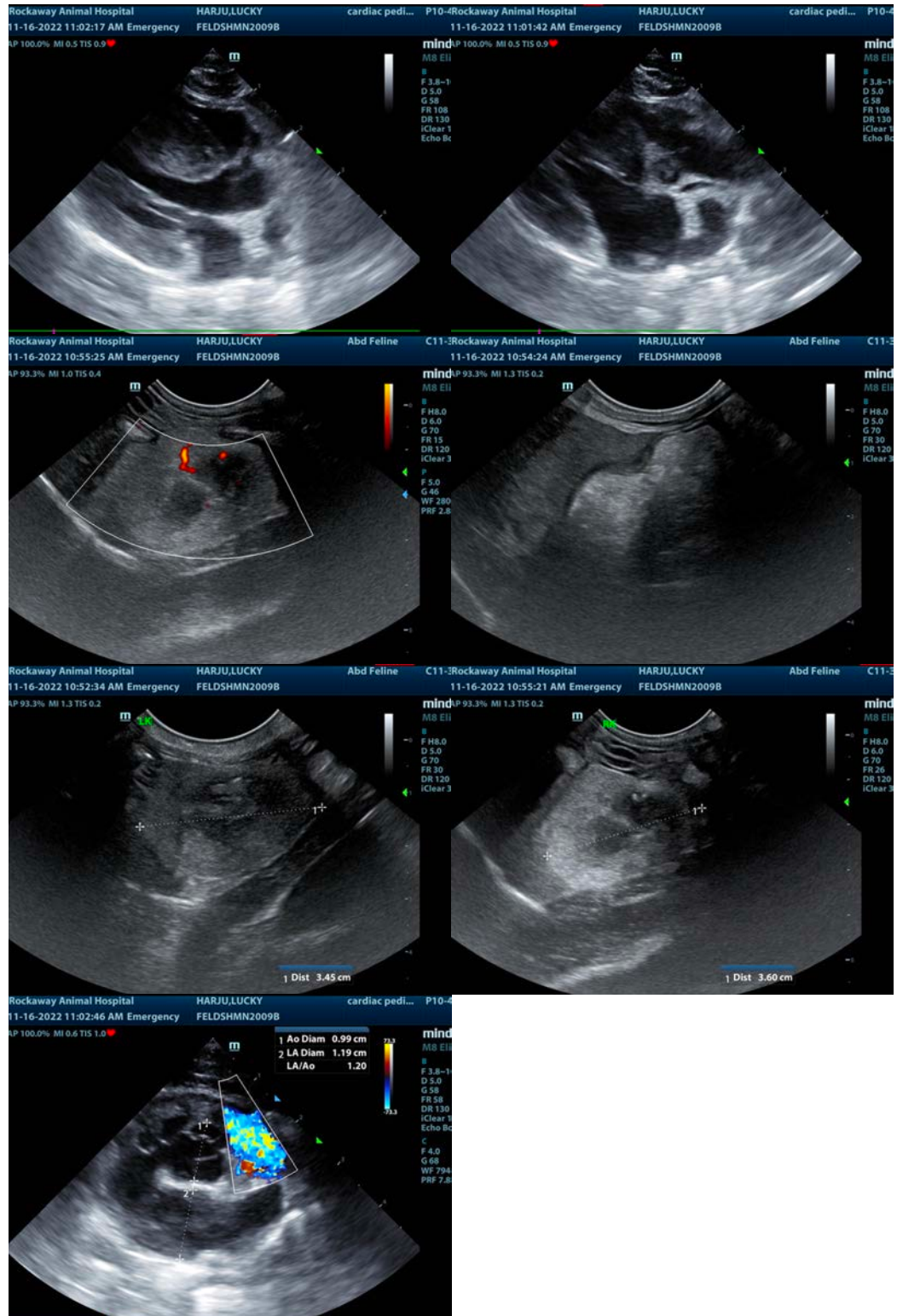
Dr. Ascot

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**PATIENT**

Lucky Harju

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.

**SPECIES**

Feline

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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