



**PATIENT**

Luna Mohammed

**SPECIES**

Feline

**BREED**

DLH

**SEX**

Female

**AGE**

Unknown

**WEIGHT**

1.3

**INTERPRETED BY**

Eric Lindquist, DMV

DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Dr. Inam ul Haq

**HOSPITAL NAME**

City Vet Clinic

**REFERRING VET**

Dr. Inam ul Haq

**INVOICE**

23420

**DATE**

7/17/23

**PRESENTING CLINICAL SIGNS**

Found cat of unknown age. The RDVM requested abdominal ultrasound. I found left renal mass and when I was scanning the liver, I found pleural effusion. No pleural effusion was present on the day of admission as checked by the X-Rays done on that day. Abdominocentesis revealed hemabdomen; probably renal tumor is bleeding in the abdomen - the cat is severely anemic. I didn't see any mass in the chest on thoracic ultrasound scan. Cardiac ultrasound was done to rule out CHF

Abnormal PE/Chem/CBC/UA Results: ProBNP was done and it was abnormal

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

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>	--	180	0.28	1.34	0.3	41	76
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>	1.15	1.2-1.3	1.4	1.27	1.00	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** was mildly enlarged, likely owing to increased pulmonic pressures (1:1 ratio with the left atrium in 4 chamber long axis). **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). Noncardiogenic pleural effusion was noted.



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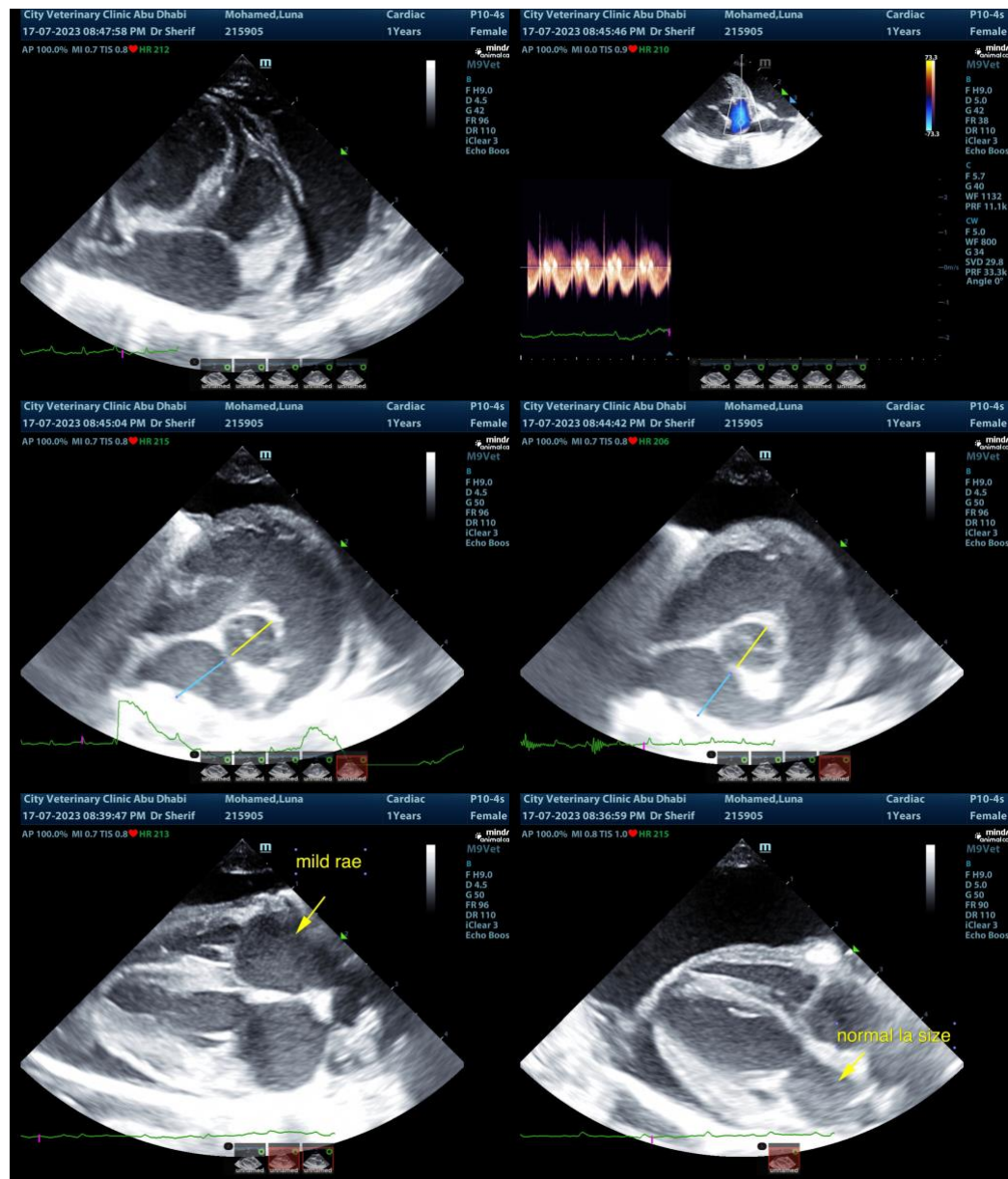
7/17/23

**ULTRASONOGRAPHIC FINDINGS**

- Normal echocardiogram with slightly prominent right heart
- Noncardiogenic pleural effusion

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Pleurocentesis and cytospin of the free fluid is indicated. Left atrial size is normal in all 3 parameters. The right heart is slightly enlarged, likely owing to increased pulmonic pressures yet not clinically an issue. If abdominal neoplasia is present, then metastatic disease through the thoracic duct and secondary pleural effusion is suspected. No evidence of primary cardiac disease.





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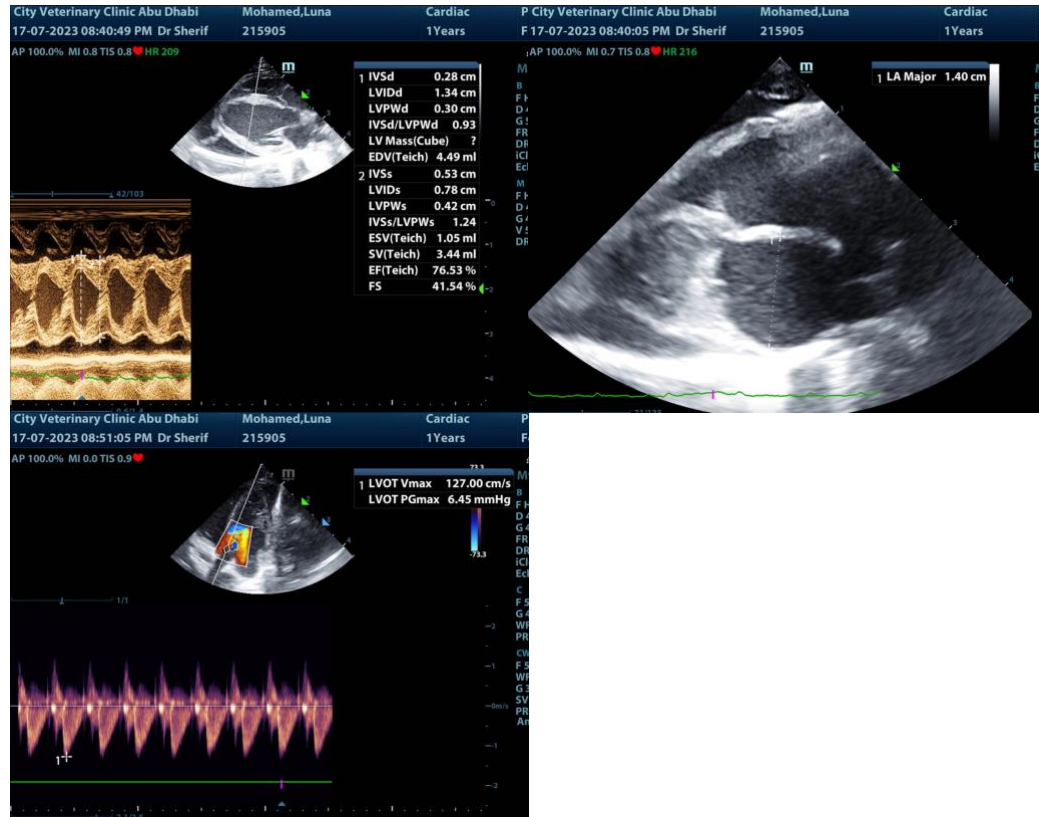
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**The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.**

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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