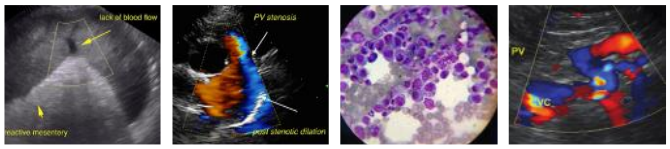
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT

Mishka Mendes

SPECIES

Feline

BREED

DSH

SEX

FS

AGE

5yr

WEIGHT

11.5lb

INTERPRETED BY

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

IMAGING PERFORMED BY

Jessica Miller

HOSPITAL NAME

Newton VH

REFERRING VET

Dr. Verhalen

INVOICE

12922ag

DATE

02/07/2023

PRESENTING CLINICAL SIGNS

Vomiting, not eating, Abnormal fpl, Elevated globulin

Abnormal PE/Chem/CBC/UA Results: glob 6.1

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

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		113	0.45	1.4	0.47	34.3	67.6

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	1.5	1.75	1.6	0.93	0.6	

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

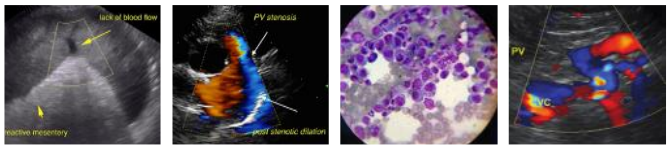
Cardiac Presentation

The echocardiogram in this patient demonstrated mild increased left atrial size based on 3 separate LA measurements. The cranial and caudal mitral valve leaflets presented normal linear structure and kinetics. No overt MR on Doppler. 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. The contractility of the ventricular walls was mildly subnormal yet likely adequate 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. Normal measured LVOT. The right atrium and auricle revealed mild prominent size comparable to the LA with normal structure and content. No evidence of masses was noted or chamber overload. Tricuspid valvular assessment demonstrated adequate linear morphology and kinetics. Minor TR on Doppler. 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). Mildly decreased RVOT velocity. A non-homogenous ill-defined mid to caudal thoracic mass measuring ~ 3.0 cm in diameter was present extending to the level of the associated diaphragm without overt evidence of invasion. Concurrent scant pleural effusion was present.

ULTRASONOGRAPHIC FINDINGS

- Minor LA/RA enlargement
- Subnormal likely adequate LV contractility
- Mild TR-not consistent with overt clinical pulmonary hypertension
- Ill defined non-homogenous mid to caudal thoracic mass lesion, scant pleural effusion

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT

Mishka Mendes

SPECIES

Feline

BREED

DSH

SEX

FS

AGE

5yr

WEIGHT

11.5lb

INTERPRETED BY

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

IMAGING PERFORMED BY

Jessica Miller

HOSPITAL NAME

Newton VH

REFERRING VET

Dr. Verhalen

INVOICE

12922ag

DATE

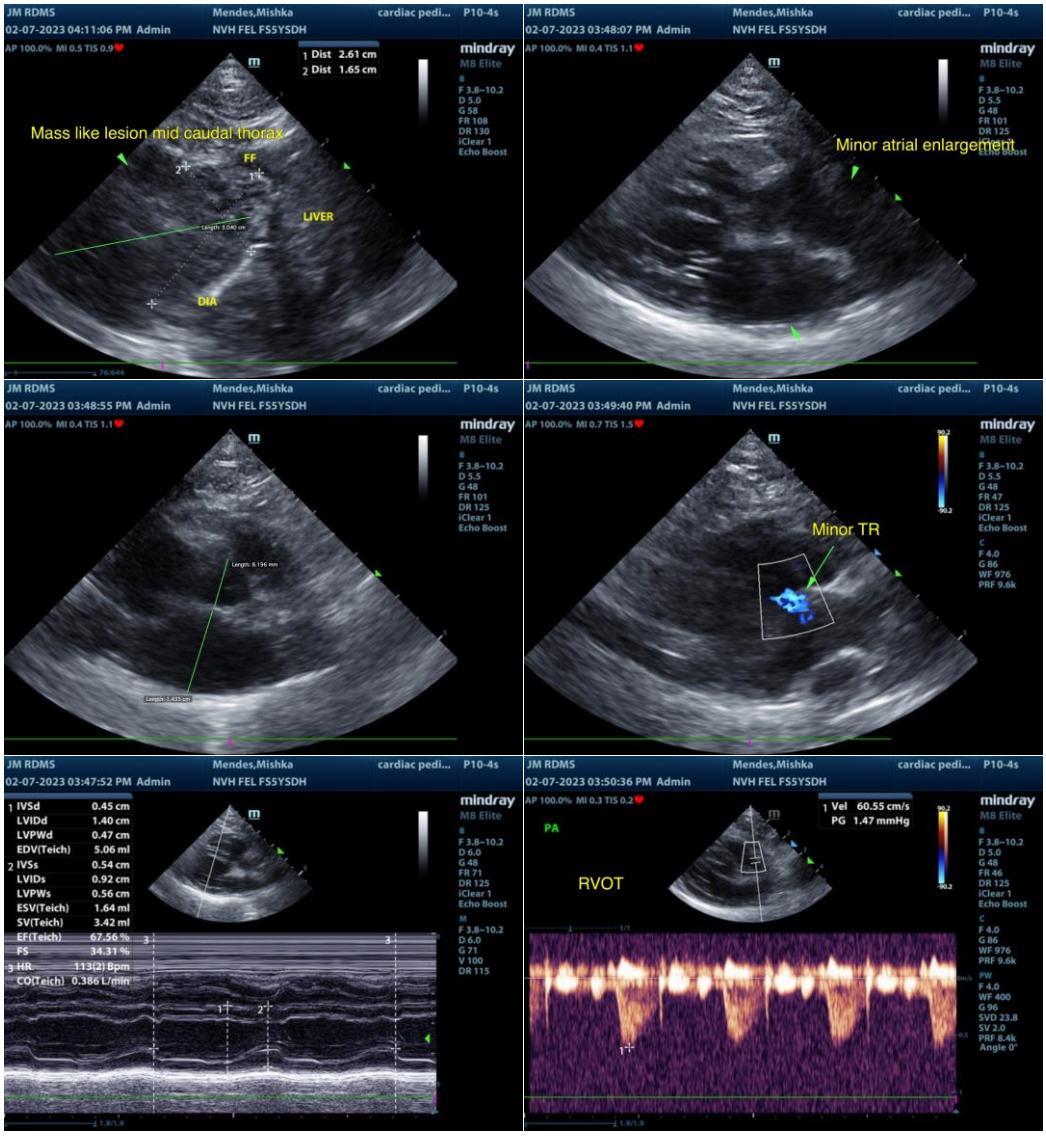
02/07/2023

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

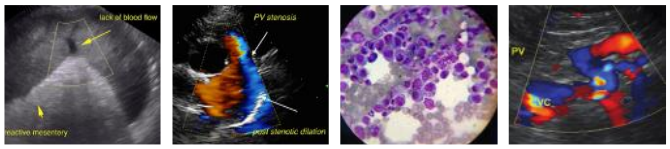
Without evidence of significant left/right heart chamber enlargement and with adequate LV contractility the cardiac presentation was not overtly consistent with a definitive cardiogenic component to the patient's radiographic abnormalities.

No evidence of HCM criteria with potential system disease contributing to the decreased LV contractility and possible arrythmia. No indication for cardiac medications. If there is strong clinical concern for concurrent radiographic edema, a low dose diuretic trial would be reasonable.

Sonographic monitoring based on the clinical impression of the patient to assess for non-obvious emerging cardiomyopathy may be considered.



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT

Mishka Mendes

SPECIES

Feline

BREED

DSH

SEX

FS

AGE

5yr

WEIGHT

11.5lb

INTERPRETED BY

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

IMAGING PERFORMED BY

Jessica Miller

HOSPITAL NAME

Newton VH

REFERRING VET

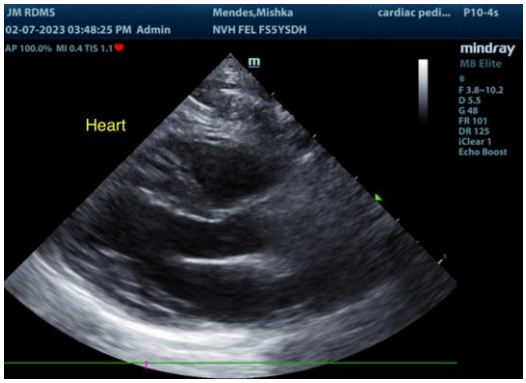
Dr. Verhalen

INVOICE

12922ag

DATE

02/07/2023



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.

R. McKenzie Daniel, DVM, DABVP (Canine/Feline Practice)
mac.daniel@sonopath.com