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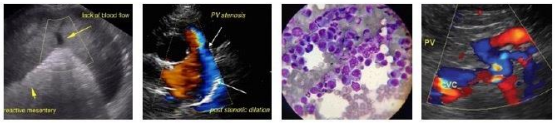

THE FOCAL ZONE
IMAGING PERFORMED BY
289-808-2608 info@thefocalzone.com

PATIENT

Dudley Koop

SPECIES

Canine

BREED

Doodle

SEX

MN

AGE

7 yr

WEIGHT

22 kg

INTERPRETED BY

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

IMAGING PERFORMED BY

Crystal Hill

HOSPITAL NAME

Grand River Veterinary Hospital

REFERRING VET

Dr. Hornak

INVOICE

10764ag

DATE

06/08/2022

PRESENTING CLINICAL SIGNS

History: Presented for ongoing inappetance today. Has been on Gabapentin for possible pancreatitis. Still not eating much at all over the last 5 days. Not really drinking well either. Owner noted labored breathing and rapid HR last night. Sudden onset Uveitis. Sclera injected, right worse than left. Rapid irregular heartrate about 150-170bpm. ECG in clinic suggestive of A.Fib. Possible slightly reactive and painful abdomen. Cardiac arrythmia. Increased occular pressure last week at first appt. BP hard to get a good reading but about 150-170.

Abnormal PE/Chem/CBC/UA Results: GLucose low, ALT high 472(10-125), RBCs high, Hgb high, Retics low, Platelets low, MPV high, PCT low.

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (Boon method)	LA/AO (Heart Base; Swe)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.3	28-40	40-100	<0.6
PATIENT			NM	1.34	34.4	66.9	0.3
CANINE CARDIAC PARAMETERS	**HR** (BPM)	**AV VMAX** (m/s)	**PV MAX** (m/s)	**BODY WEIGHT** (kg)	**LA** 2D short axis Base view (cm)	**LVIDd** Avg; 2D and m-mode short axis (cm)	**LVIDs** Avg; 2D and m-mode short axis (cm)
NORMAL PARAMETER	50-100	0.7-1.7	0.7-1.6				
PATIENT	161	1.8	1.4		3.5	3.2	

Cardiac Presentation

The echocardiogram in this patient demonstrated normal left atrial size based on 2 separate methods of LA evaluation. The cranial and caudal mitral valve leaflets presented normal linear structure, extension in systole, and union in diastole with normal kinesis. Minor primarily centralized MR was present. The left ventricle presented 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 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. Tricuspid valvular assessment demonstrated adequate linear morphology and kinesis. The right ventricle was of normal size (1/3 diameter of LV), chordae structure, myocardial echogenicity and thickness. Pulmonary outflow 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. No evidence of cardiac, pericardial or cranial mediastinal masses. Consistent unclassified arrhythmia was present.

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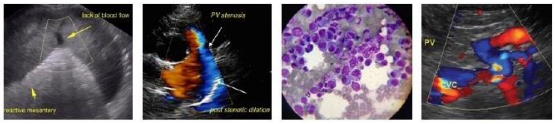

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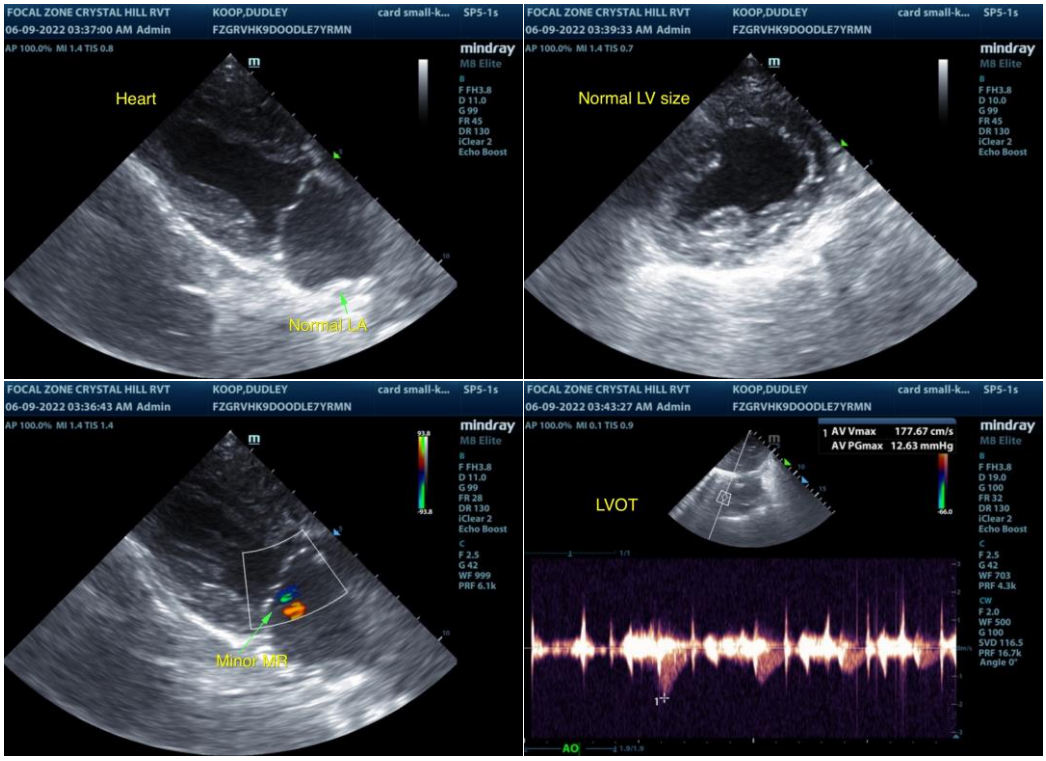
ULTRASONOGRAPHIC FINDINGS

- Overtly normal cardiac structure and subjective function
- Minor MR
- Consistent unclassified arrhythmia

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The study on this patient revealed no evidence of significant structural cardiomyopathy as an obvious cause of the arrythmia, specifically no evidence of LA enlargement as a potential overt inciting factor for atrial fibrillation. The minor MR is considered incidental and not hemodynamically significant given the lack of LA enlargement. No indication for cardiac medications used to treat structural cardiomyopathy. ECG assessment or potential Holter monitor recommended for further classification with potential for cardiology consult. Given the CBC/Chemistry abnormalities and patient's overall clinical presentation, full abdominal ultrasound could be considered for underlying intra-abdominal pathology as a contributing factor to the arrhythmia pending further classification.

Three view chest radiographs recommended if not done to assess for occult thoracic pathology.



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)

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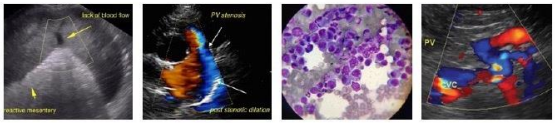

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