



PATIENT PRESENTING CLINICAL SIGNS

Jeremy Cooper

History: Grade V/VI murmur.
Abnormal PE/Chem/CBC/UA Results: Elevated chol and platelets

SPECIES

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

BREED

Cavalier King Charles
Spaniel

SEX

Neutered male

AGE

10 years

WEIGHT

20 lbs

The echocardiogram in this patient demonstrated enlarged **left atrial** size based on 3 different LA measurement methods. Chamber volumes and echogenicity were normal. The cranial and caudal **mitral** valve leaflets presented vegetative thickening consistent with endocardiosis. Prolapse of the anterior mitral valve leaflet was noted. Doppler indicated measurable insufficiency. 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. Aortic insufficiency was noted as well. 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. 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. No echographically detectable evidence of infiltrative disease was visible. The cranial **mediastinum and pericardial regions** were free of masses in the visible window.

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Shari Reffi, CVT

HOSPITAL NAME

Tranquility VC

REFERRING VET

Dr. Blackman

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	<1.6	28-40	40-100	<0.6
PATIENT	5.83	2.46	1.67	1.7			0.34
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT	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	BELOW	BELOW	BELOW	BELOW
PATIENT		4.14		20 lbs	5.06		

INVOICE

32350

ULTRASONOGRAPHIC FINDINGS

Advanced Stage B2 valvular disease with mitral valve prolapse and left atrial enlargement.

DATE

8/16/22

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

I recommend assessing sleeping respiratory rate in this patient. I am concerned for emerging C1



PATIENT

Jeremy Cooper

valvular disease. This presentation is technically advanced stage B2 valvular disease; however, emerging C1 may be an issue. Blood pressure measurements are warranted. If the systolic pressure is > 160 then ace inhibitor therapy could be justified in addition to Spironolactone at 1-2 mg/kg b.i.d. Pimobendan can be utilized at 0.3 mg/kg b.i.d. based on B2 criteria.

SPECIES

Canine

The heart has some volume overload and is working to compensate for the valvular insufficiency. Target respiratory rate is < 20 resp/minute after therapy. After initiating therapy, I recommend recheck on the clinical exam, BUN, Creatinine, USG, Chest radiographs & Blood pressure in 5-7 days. Recheck echo in 1 month. Earlier if clinical decompensation is occurring. I do not recommend anesthesia at this time until stabilization has occurred on the recommended medications. Repeat preanesthetic echo is ideal if anesthesia is eventually necessary.

BREED

Cavalier King Charles
Spaniel

SEX

Neutered male

AGE

10 years

WEIGHT

20 lbs

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Shari Reffi, CVT

HOSPITAL NAME

Tranquility VC

REFERRING VET

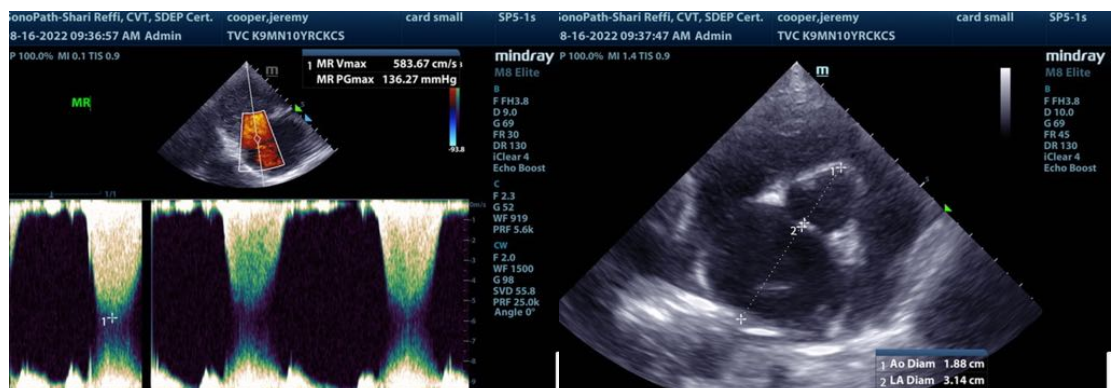
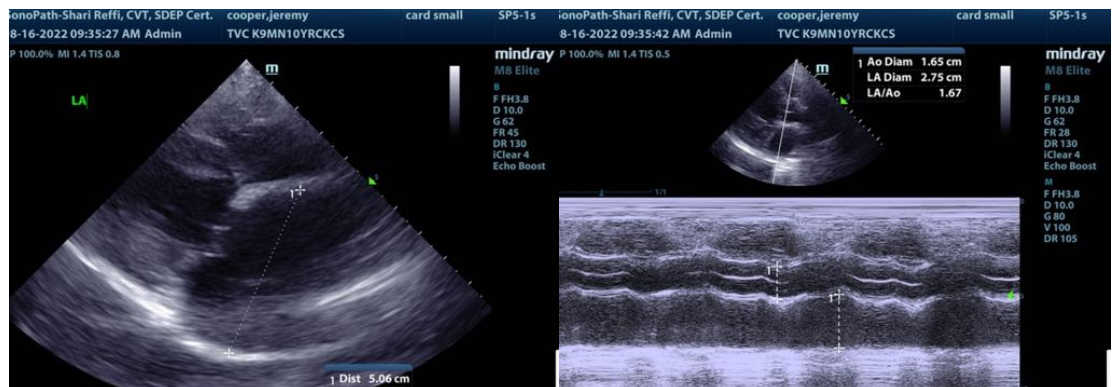
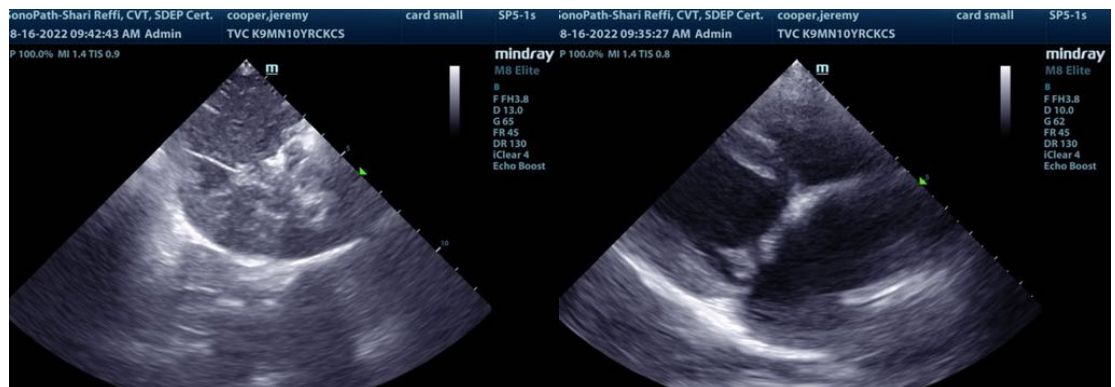
Dr. Blackman

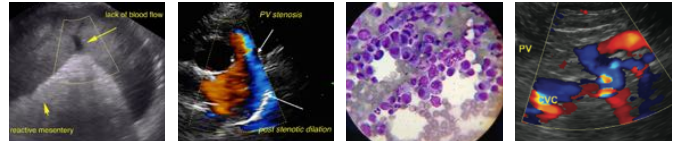
INVOICE

32350

DATE

8/16/22





PATIENT

Jeremy Cooper

SPECIES

Canine

BREED

Cavalier King Charles
Spaniel

SEX

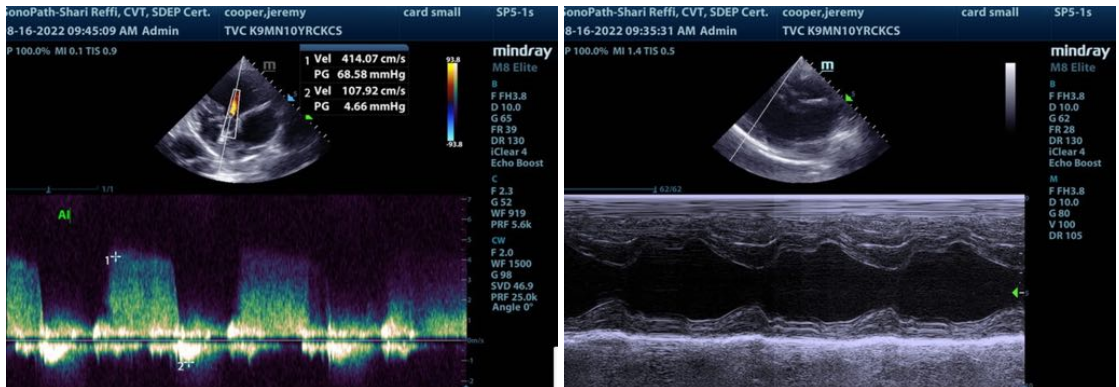
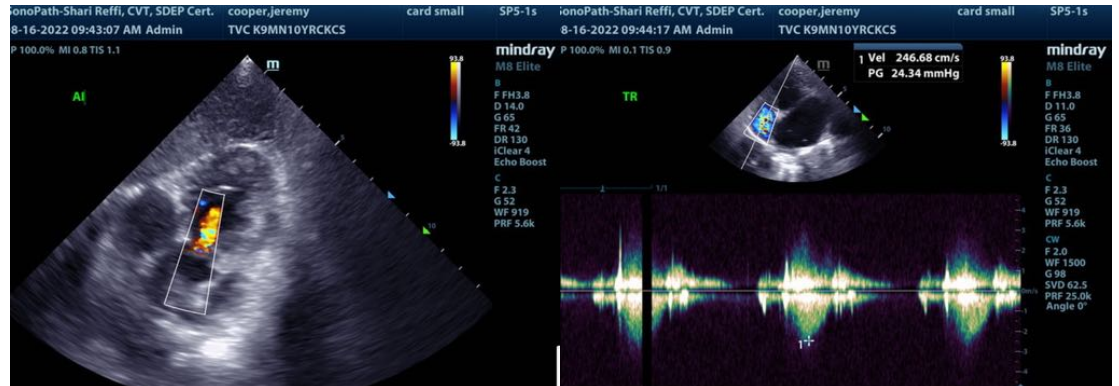
Neutered male

AGE

10 years

WEIGHT

20 lbs



INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

**IMAGING
PERFORMED BY**

Shari Reffi, CVT

HOSPITAL NAME

Tranquility VC

REFERRING VET

Dr. Blackman

INVOICE

32350

DATE

8/16/22

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
Info@SonoPath.com