



PATIENT

Coco Osmanovic

SPECIES

Canine

BREED

Bull Terrier

SEX

Male Neutered

AGE

5 years

WEIGHT

48.5lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Diane McFadden

HOSPITAL NAME

Newton Veterinary
Hospital

REFERRING VET

Dr. Bannon/Guerrero

INVOICE

31947

DATE

7/20/23

PRESENTING CLINICAL SIGNS

History: Cardiomegaly, LA dilation, CHF.

-Current medications: Furosemide 65mg IV initially Q4h now Q8h Cerenia 22mg Q24h, unasin 660mg Q8h, Pimobendan 5mg Q12h (just started once hospitalized), metronidazole 250mg Q1h2, pantoprazole 22mg Q24h.

-Abnormal PE/Chem/CBC/UA Results: Neutrophils 224

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. The left ventricular wall is normal in dimension. The LV chamber is normal with adequate myocardial function. The left atrium is markedly dilated and bulbous in appearance. Flow is suspected to be crossing the interatrial septal (L-R) most consistent with a PFO. The right atrium is normal. The right ventricle appears normal. The mitral valve is thickened with an elongated club-like anterior leaflet. Lack of excursion in diastole consistent with significant stenosis. Mitral inflows support a stenotic pattern. Mild central mitral regurgitation present with a normal velocity. Trace tricuspid regurgitation seen. Blood flow through the LVOT is normal in velocity. The PV/RVOT appears normal with a normal outflow velocity. No evidence of cardiac tumors or metastatic lesions on this scan. No pleural or pericardial effusion seen.

CARDIAC CHART

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	5.0	NM	2.4	2.5	45	78	NM
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	BELOW	BELOW	BELOW	BELOW
PATIENT	180	1.5	1.5	22.0	3.8	2.9	1.6
*Normal chamber parameters expressed as a mean value (SD)				3	1.27 (5.3)	2.46 (2.46)	1.36 (5.5)
BODY WEIGHT DEPENDENT PARAMETERS				5	1.40 (4.5)	2.74 (5.2)	1.60 (4.7)
<i>*Note: All measurements based upon multi-modal images and methods. An average value is reported.</i>				10	1.50 (3.8)	3.27 (3.5)	2.06 (3.1)
				15	1.83 (2.0)	3.71 (2.4)	2.43 (2.1)
				20	2.02 (1.9)	4.14 (2.2)	2.80 (2.0)
				25	2.18 (2.4)	4.48 (2.9)	3.10 (2.5)
				30	2.33 (3.3)	4.83 (3.9)	3.39 (3.4)
				35	2.48 (4.3)	5.17 (5.0)	3.69 (4.5)
				40	2.62 (5.2)	5.48 (6.1)	3.96 (5.4)
				50	2.88 (7.1)	6.07 (8.3)	4.46 (7.4)

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The primary abnormality identified is severe mitral valve stenosis. This is a form of mitral valve dysplasia where the valve does not open adequately leading to marked left atrial pressure elevation. There is also a mild mitral regurgitation, which is commonly seen with this disorder. It is common for mitral stenosis to remain silent as a diastolic murmur is often not appreciated on



PATIENT

Coco Osmanovic

exam and is only diagnosed once decompensation develops as is suspected to be the case here. Finally, flow is suspected to be crossing the atrial septum from the LA to the RA. There is no obvious defect appreciated, likely suggesting a patent foramen ovale is present. This is benign, and likely helps relieve some degree of LA pressure. No additional issues are identified.

SPECIES

Canine

The severity of disease seen here would support CHF as the cause of current clinical signs. Continued hospitalization should be considered if the patient is or becomes unstable.

BREED

Bull Terrier

An advanced interventional procedure may be available at select universities to help relieve left atrial pressure elevation with mitral stenosis. If interested consultation with an academic facility is strongly recommended.

SEX

Male Neutered

Prognosis is poor in this case, with high risk for complications such as recurrent congestive heart failure, malignant arrhythmias and sudden death. Medications and close monitoring will help give the best prognosis possible, however the average survival time with this condition is <6 months.

AGE

5 years

Please monitor at home for cough, lethargy, inappetance, collapse/fainting episodes or increase in respiratory rate or effort. Monitoring of sleeping breathing rates is recommended to screen for recurrent CHF at home. Moderate activity restriction is advised. Omega fatty acid supplementation and mild salt restriction may be of some long-term benefit.

WEIGHT

48.5lbs

PLAN

Continue hospitalization until stable with injectable Lasix and oral Pimobendan therapy. Discharge on the following: administer Pimobendan 0.3mg/kg PO q12h. Administer Furosemide 1-2mg/kg PO q12h. Institute Spironolactone 1-2mg/kg PO q12h. Consider referral as discussed once stable.

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

Recheck renal panel and BP in 10-14 days to ensure tolerance of medications, then every 3-4 months lifelong.

IMAGING PERFORMED BY

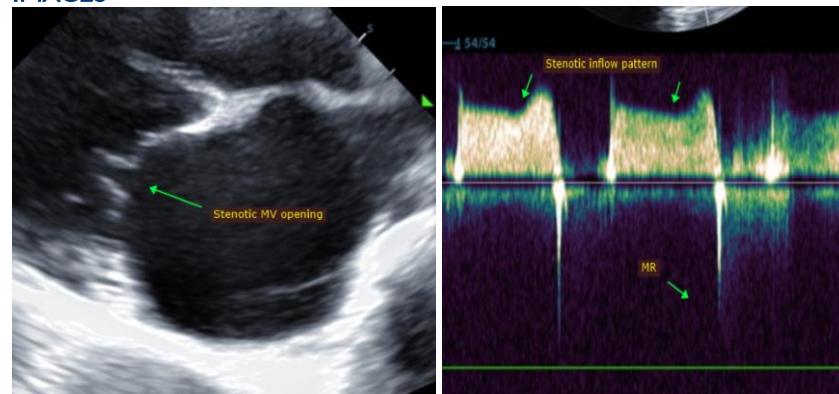
Diane McFadden

A recheck echocardiogram is recommended in 6 months to screen for progression.

HOSPITAL NAME

Newton Veterinary Hospital

IMAGES



REFERRING VET

Dr. Bannon/Guerrero

INVOICE

31947

DATE

7/20/23



PATIENT

Coco Osmanovic

SPECIES

Canine

BREED

Bull Terrier

SEX

Male Neutered

AGE

5 years

WEIGHT

48.5lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

**IMAGING
PERFORMED BY**

Diane McFadden

HOSPITAL NAME

Newton Veterinary
Hospital

REFERRING VET

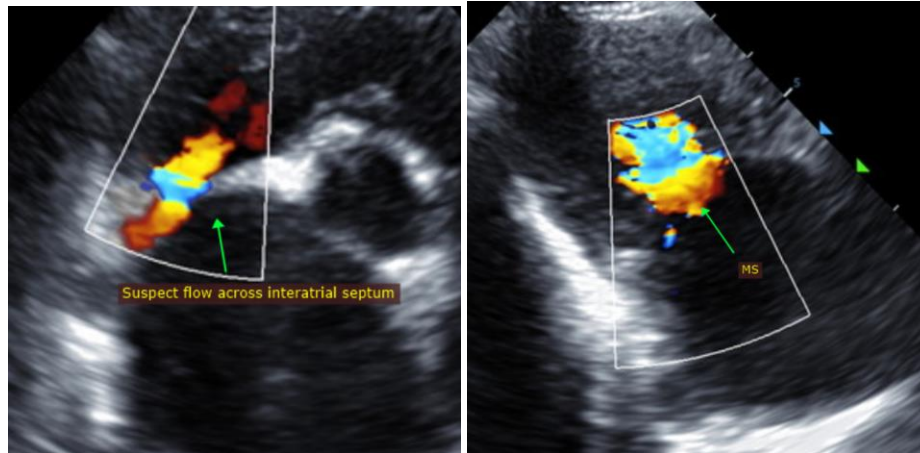
Dr. Bannon/Guerrero

INVOICE

31947

DATE

7/20/23



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

Thank you for this referral. This report was generated using transcription software, and minor dictation errors may be present. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance, please contact me.

Maggie Machen Lamy, DVM
Diplomate of the American College of Veterinary Internal Medicine (Cardiology)
info@sonopath.com