



PATIENT PRESENTING CLINICAL SIGNS

Jane Montagna Coughing, cardiomegaly w/ tracheal elevation +/- mild edema on rads, G 4/6 HM L side, bradycardia
Current meds: Furosemide 20mg BID instituted 12/17 pending echo
Abnormal PE/Chem/CBC/UA Results: NSF

SPECIES

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

BREED

Mixed

SEX

Female (Spayed)

AGE

12 years

WEIGHT

31.5 lbs.

INTERPRETED BY

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

IMAGING PERFORMED BY
Meghan Morse, LVT,
CVT

HOSPITAL NAME

Midland Park VH

REFERRING VET

Dr. Shokoff

INVOICE

10486

DATE

12/18/25

| CANINE CARDIAC PARAMETERS | MR VMAX (m/s) | TR VMAX (m/s) | LA/AO (M-Mode) | LA/AO (Heart Base; Swe) | FS (%) | EF (%) | EPSS (cm) |
|---------------------------|---------------|---------------|----------------|-------------------------|---------------------|------------------------------------------|------------------------------------------|
| NORMAL PARAMETER | 4.5-5.5 | <2.7 | 1.3 | Up to 1.6 | 28-40 | 40-100 | <0.6 |
| PATIENT | 5.0 | | | 1.8 | 49 | 80 | 0.3 |
| CANINE CARDIAC PARAMETERS | HR (BPM) | AV VMAX (m/s) | PV MAX (m/s) | BODY WEIGHT (kg) | LAD LA MAX4 Chamber | 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 | NM | 1.6 | 1.6 | | 4.7 | 4.5 | |

Cardiac Presentation

The echocardiogram in this patient demonstrated moderate increased **left atrial** size based on 2 different LA measurement methods with mild interatrial septal deviation. The cranial and caudal **mitral** valve leaflets presented thickening consistent with endocardiosis. Doppler indicated moderate eccentric insufficiency (MR velocity 5.0 m/s). The **left ventricle** presented moderate increased LV dimension. 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 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 cardiac / pericardial tumors was visible. No evidence of arrhythmia or hepatic congestion.

ULTRASONOGRAPHIC FINDINGS

- Chronic mitral valve disease (ACVIM B- emerging C)



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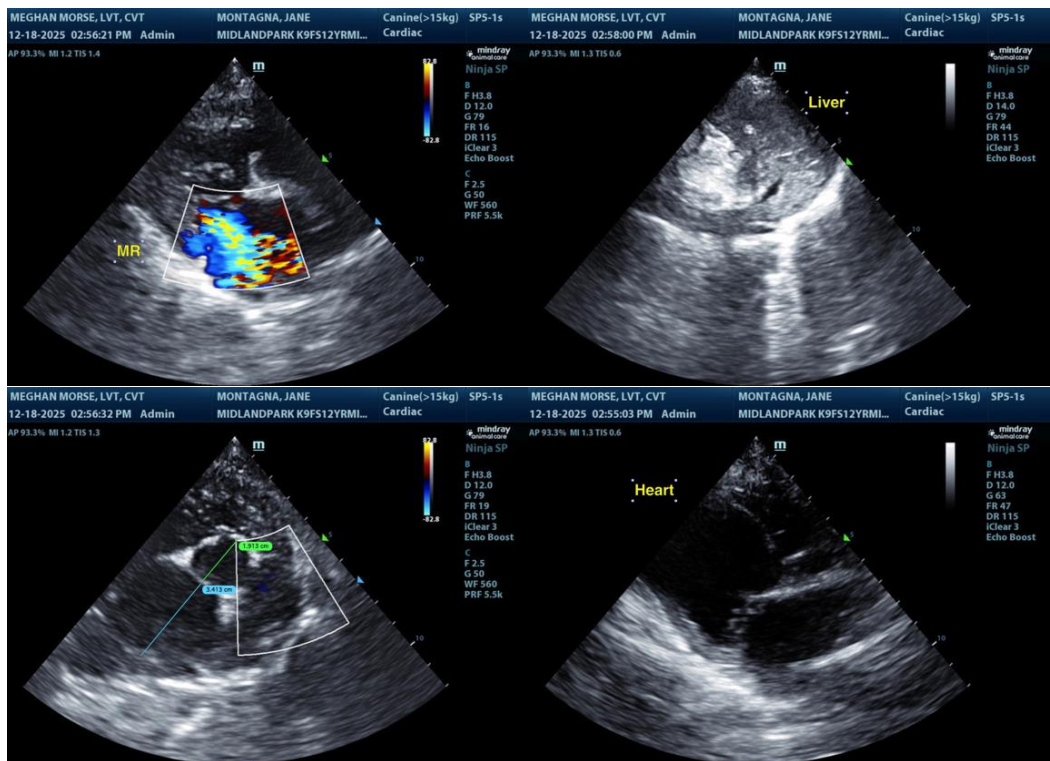
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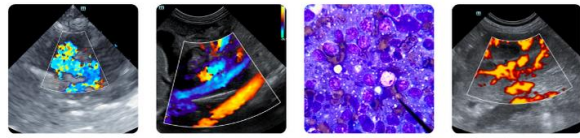
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The degree of LA/LV enlargement indicated that the current and future risk of complications secondary to MR is at least moderately elevated with potential for emerging left heart volume overload. There is no evidence of additional clinical issues such as LV systolic dysfunction or overt clinical pulmonary hypertension. Pimobendan 0.3 mg/kg BID, lowest effective dose Lasix 1.0-2.0 mg/kg BID, given reported evidence of radiographic pulmonary edema, and ACE inhibitor 0.5 mg/kg SID is recommended with clinical and radiographic monitoring. Mild salt restriction and omega fatty acid supplementation may prove beneficial. Baseline monitoring of resting respiration rate, as well as monitoring of renal parameters, while on diuretic therapy, going forward is advised. Prognosis is guarded to variable with sonographic monitoring indicated. Recheck echocardiogram is suggested in 6 months, sooner if clinically indicated. Anesthetic risk is moderately elevated. If required the following protocol is suggested with judicious IV fluid use and close clinical monitoring.

Suggested anesthetic protocol may include opioid or Benzodiazepine pre-med, induction with Propofol or Alfaxalone, and appropriate gas anesthesia with avoidance of alpha 2 agonists.



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.



PATIENT

Jane Montagna

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.

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