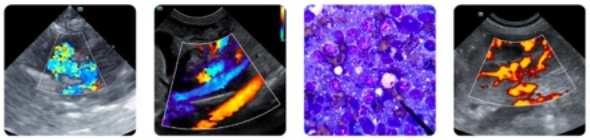


PATIENT

Shmoopy Colling

SPECIES

Feline

BREED

Domestic Shorthair

SEX

Neutered male

AGE

16 years

WEIGHT

13.4 lbs

INTERPRETED BY

Bradley Harris, DVM, DACVECC, DACVIM (cardiology)

IMAGING PERFORMED BY

Chrissy Krell, DVM

HOSPITAL NAME

Companion AH

REFERRING VET

Dr. Lider

INVOICE

77919

DATE

5/24/26

PRESENTING CLINICAL SIGNS

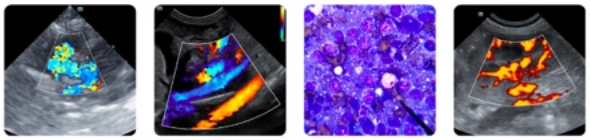
History: Presented recently for an exam, concerns about arthritis or mobility changes. Doctor noted arrhythmia on auscultation - no history of changes previously.
Concerns: structural heart disease (suspect HCM), azotemia - suspect renal, atrial fibrillation, systemic hypertension.
Abnormal PE/Chem/CBC/UA Results: PE: noted arrhythmia, irideal lesion (likely "freckle"), pain noted on caudal spine. 5/5/2026: NT-proBNP: above 1500 pmol/L (abnormal) T4: 2.7 (normal) Chem: AMY 1121 (H), BUN 44 (H), CRE 2.5 (H), ECG: atrial fibrillation BP: 181 average systolic (3 readings tail, 1 reading front leg) USG: 1.018 (urinated during TXR) TXR: increased sternal contact on lat view, dilated pulmonary vessels VD view, VHS 9.5, aorta appears more rounded BP: 134/101 (112), 200/148 (165), 223/174 (190), 168/120 (136), Mean Systolic 189mmgHg

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

The left atrium is moderately enlarged. There are no distinct left atrial thrombi/clots or spontaneous echo contrast appreciated. The left ventricle is mildly dilated with normal wall thickness, and no evidence of restriction. Left ventricular systolic function is adequate. The right atrium and ventricle are minimally dilated with normal systolic function. The anterior and posterior mitral and tricuspid valve leaflets presented normal linear structure, extension in systole, and union in diastole without regurgitation. There is no evidence of systolic anterior mitral motion documented. The left ventricular outflow tract demonstrated normal laminar flow and subjective structural valvular integrity. The visible aorta is unremarkable. Pulmonary outflow tract assessment revealed normal valve structure, laminar flow, and appropriate diameter and distensibility. There is no evidence of semilunar valve insufficiency or pulmonary hypertension documented. There is scant pericardial, but no pleural or free peritoneal fluid noted.

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	6.09 kg	230	0.49	1.83	0.47	45	80
FELINE CARDIAC PARAMETERS	**LA/AO** (M-mode)	**LA/AO HEART BASE** (Sisson)	**LAD** LA MAX 4 Chamber		**LVOT VEL.** (m/s)	**RVOT VEL.** (m/s)	**IVRT** (m/)
NORMAL PARAMETER	<1.5	1.6	0.7-1.7		<1.6	<1.3	40-60
PATIENT	NM	2.0	2.14		1.3	0.8	NM
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							

ECG:
There is an irregularly irregular tachyarrhythmia with no discernable P-waves. The average heart rate is 230bpm. The rhythm is supraventricular in origin with narrow QRS complexes (<70ms). There is no overt ventricular ectopy identified. The rhythm is most consistent with uncontrolled atrial fibrillation.



PATIENT

Shmoopy Colling

SPECIES

Feline

BREED

Domestic Shorthair

SEX

Neutered male

AGE

16 years

WEIGHT

13.4 lbs

INTERPRETED BY

Bradley Harris, DVM, DACVECC, DACVIM (cardiology)

IMAGING PERFORMED BY

Chrissy Krell, DVM

HOSPITAL NAME

Companion AH

REFERRING VET

Dr. Lider

INVOICE

77919

DATE

5/24/26

ULTRASONOGRAPHIC FINDINGS

These findings identify significant atrial dilation in the absence of any LV hypertrophy or outflow tract obstruction. In the absence of any iatrogenic (fluids/steroid) or intrinsic (hyperthyroidism or severe anemia) factors that could represent a volume load, the findings are consistent with the myocardial form of restrictive cardiomyopathy (RCM, previously considered UCM). The degree of atrial dilation makes CHF a likely explanation for the clinical/radiographic signs, and is also the likely etiology of the atrial fibrillation.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

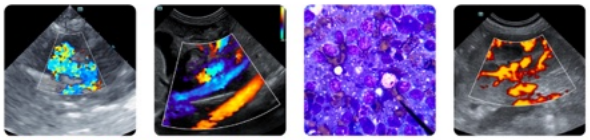
Treatment for CHF is recommended, to include Lasix (1-2mg/kg q24-BID), enalapril (0.5mg/kg q24, assuming normal BP and kidney function), and Vetmedin (0.25-0.35mg/kg BID). Diltiazem (7.5mg/catTID standard release or 30mg/cat BID extended release) should also be initiated as rate control for the atrial fibrillation. A repeat chest X-rays, chemistry, ECG, and BP are recommended again in 1-2 weeks, with upwards titration of the diltiazem and diuretics as needed. Additionally, Plavix/clopidogrel (1/4 of a 75 mg tablet, or 18.75 mg PO q 24 h) +/- rivaroxaban (2.5mg q24) should be initiated as an anti-thrombotic. Due to the bitter taste of this medication, it may be best to place it in an empty gelatin capsule or use products such as a Pill Pocket. Barring any setbacks or complications, a repeat echo/rads will be recommended in 3-6 months.

Anesthesia considerations:
Anesthesia should be avoided until signs of congestion have resolved. If anesthesia is necessary, then alpha-2 agonists, ketamine, high dose acepromazine, and Telazol should be avoided. If an ACE inhibitor (enalapril, benazepril) or spironolactone is being given, it should not be administered on the morning of general anesthesia. Other cardiac medications should be administered per the normal dosing schedule. Anesthetic IV fluid use should be limited to < 3 ml/kg/hr and, if IV fluid therapy is administered during the procedure, a 1 mg/kg dose of IM Lasix should be administered when the patient is awake and standing in recovery. A shorter anesthetic duration will reduce the risk of complications. Pre-oxygenation is advised. Premedication with an opioid (i.e., butorphanol, hydromorphone, oxymorphone) with or without a benzodiazepine is generally the safest protocol. An induction agent such as Propofol, alfaxalone, or diazepam/etomidate can be used to effect. Maintenance of anesthesia with isoflurane or sevoflurane is reasonable.

Diet:
A high-quality food from Hills, Royal Canin, Science Diet, Eukanuba, Iams, or Purina that is highly palatable with adequate protein and calories for maintaining optimal body condition with mild dietary sodium restriction (<100 mg/100 kcal) is recommended. Consider omega-3 fatty acid supplementation.

Activity:
Avoid strenuous activity.

SonoPath
FOSTERING THE ART OF VETERINARY MEDICINE™



Clinical Sonography & Telecytology
Educational Teleconsultation Services™

SonoPath.com | info@sonopath.com | 1.800.838.4268

PATIENT

Shmoopy Colling

SPECIES

Feline

BREED

Domestic Shorthair

SEX

Neutered male

AGE

16 years

WEIGHT

13.4 lbs

INTERPRETED BY

Bradley Harris, DVM, DACVECC, DACVIM (cardiology)

IMAGING PERFORMED BY

Chrissy Krell, DVM

HOSPITAL NAME

Companion AH

REFERRING VET

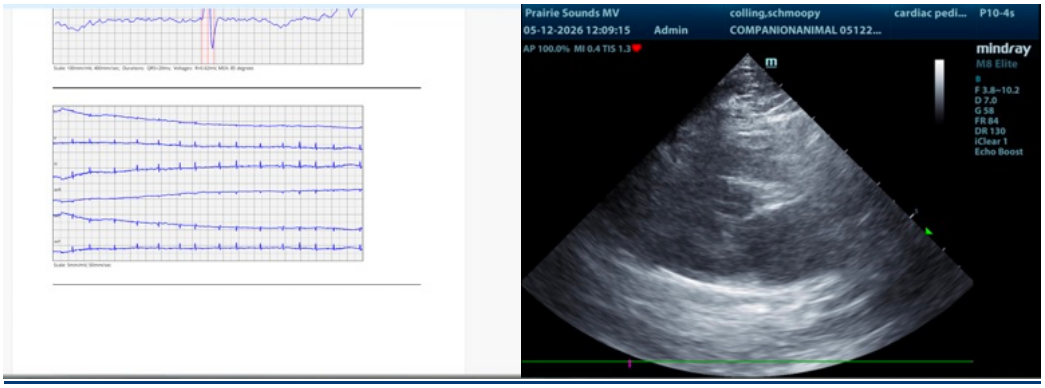
Dr. Lider

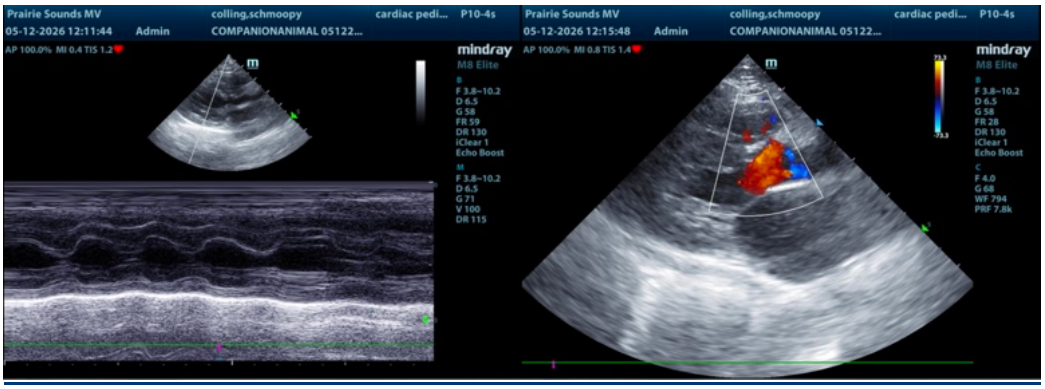
INVOICE

77919

DATE

5/24/26





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.

Bradley Harris, DVM, DACVECC, DACVIM (cardiology)

info@SonoPath.com