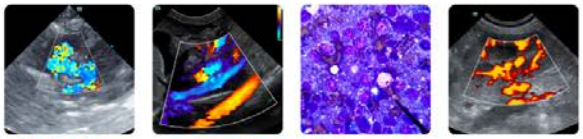


PATIENT

Lincoln Beers

SPECIES

Feline

BREED

Siamese

SEX

Neutered Male

AGE

6 Years

WEIGHT

5.8 kg

INTERPRETED BY

Brad Harris, DVM, DACVECC, Residency trained in cardiology

IMAGING PERFORMED BY

Andrea Nicastro, DVM, DACVIM

HOSPITAL NAME

Veterinary Specialty Care Blue Pearl Mt. Pleasant

REFERRING VET

Dr. Danielle Frasier

INVOICE

71514

DATE

11/2/25

PRESENTING CLINICAL SIGNS

Presents for a fever/lethargy. Last wed, p started becoming ADR. Thursday, p became more lethargic and by Friday, he also had a decrease in appetite and drinking. P showed up Friday for a wellness visit at RDVM, but he had a 106 fever so they did not vaccinate. RDVM ran BW and took rads, fever slowly started to decrease throughout the day. Around 2p today had abnormal event, vomited, laterally recumbent, bradycardic (HR ~130), RR 60 and efforted, temp dropped to 95F, improved with time (HR back up to 160, RR 36 with minimal effort) Rx: IVF, convenia 10/31, enrofloxacin 11/2, onsior 11/2, cerenia 11/2

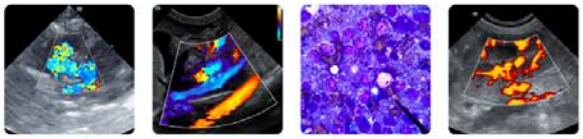
Abnormal PE/Chem/CBC/UA Results: Cardiovascular: No murmur or arrhythmia noted Respiratory: Eupnea, normal bronchovesicular sounds on all lung fields,CBC: HCT 20.9 (L), PCV 21% Eos 0.01 (L) Chem: BUN 12 (L), Ca 7.1 (L), K 2.6 (L), Alb 2.1 (L), ALP <10 (L), Tbili 2.2 (H) Abnormal snap ProBNP HR/RR/BP: 160/36/153 Rad report: Chest rads - small amount of pleural effusion Clinically normal radiographs of the abdomen.

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

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	5.8	NM	0.54	1.46	0.47	54	96
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	1.51	1.22	1.73		1.1	1.22	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							

Cardiac Presentation

The left atrium is normal in dimension, based on 3 separate methods of evaluation. The left ventricle is normal in dimension as well as systolic function or contractility based on fractional shortening and systolic left ventricular dimensions. The right atrium and ventricle are subjectively enlarged with reduced systolic function. The anterior and posterior mitral valve leaflets presented normal linear structure, extension in systole, and union in diastole, without regurgitation, prolapse, or myxomatous changes noted. The tricuspid valve leaflets display mild to moderate eccentric regurgitation with evidence of pulmonary hypertension. The left ventricular outflow tract demonstrated normal laminar flow and the visible aorta is unremarkable. The right ventricular outflow tract assessment revealed normal laminar flow, with an increased main pulmonary artery diameter and reduced distensibility. There is trace pulmonic insufficiency and no aortic valve insufficiency documented. There is no



PATIENT

Lincoln Beers

SPECIES

Feline

BREED

Siamese

SEX

Neutered Male

AGE

6 Years

WEIGHT

5.8 kg

INTERPRETED BY

Brad Harris, DVM, DACVECC, Residency trained in cardiology

IMAGING PERFORMED BY

Andrea Nicastro, DVM, DACVIM

HOSPITAL NAME

Veterinary Specialty Care Blue Pearl Mt. Pleasant

REFERRING VET

Dr. Danielle Frasier

INVOICE

71514

DATE

11/2/25

pericardial, but mild pleural, and mild to moderate free peritoneal fluid noted. The cardiac chambers, pericardial and visible extra-cardiac regions were free of masses, spontaneous echo contrast, or thrombi.

ULTRASONOGRAPHIC FINDINGS

These findings identify significant pulmonary hypertension (PH) in the absence of any clinically relevant left-sided disease. Therefore, cor pulmonale secondary to primary pulmonary disease/PH is the likely cause for morbidity. Pulmonary hypertension in cats is most commonly secondary to primary respiratory disease (chronic asthma or other forms of pulmonary interstitial disease). Pulmonary hypertension can also develop secondary to pulmonary thromboembolism (PTE). Less commonly, pulmonary hypertension is identified in cats as an idiopathic condition. The degree of PH has in right sided cardiac enlargement (cor pulmonale), and possibly subsequent congestive heart failure, however other causes of the effusion should be investigated.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Therapy for CHF is recommended, and should include Lasix (1 mg/kg BID), enalapril (0.5 mg/kg SID), Vetmedin (0.25-0.35 mg/kg BID), sildenafil (1 mg/kg BID), and spironolactone (1 mg/kg BID). If a source of the effusion is identified that is not cardiac in nature, then diuretic therapy should be discontinued and the enalapril, Vetmedin and sildenafil continued. A repeat echo is indicated in 3-6 months.

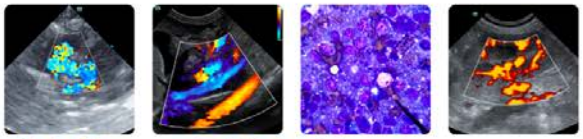
Anesthesia considerations:
Anesthesia should be avoided if possible. If anesthesia is necessary, then alpha-2 agonists, ketamine, and Telazol should be avoided. If an ACE inhibitor (enalapril, benazepril) or spironolactone is being given, it should not be administered on the morning of general anesthesia. Other cardiac medications should be administered per the normal dosing schedule. Fluid therapy during anesthesia should be considered at a reduced rate (5 ml/kg/hour) if possible (i.e., if not hypotensive). A shorter anesthetic duration will reduce the risk of complications. Pre-oxygenation is mandatory. Premedication with an opioid (e.g., 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. Ensure the patient is not currently receiving a boutique, exotic, or grain-free diet.

Activity:
Moderate physical activity (meandering walks, exploring the backyard, playing with toys inside, getting excited when family gets home, etc.) is encouraged, but periods of strenuous aerobic activity (jogging, strenuous outdoor ball play, prolonged play at the dog park, etc.) should be avoided, especially during periods of high heat (> 80 F) and humidity. Dogs with heart disease tend to tolerate cool and cold temperatures much better than high temperatures. Avoid sudden increases in activity (e.g. 2 block walks during the week but 2 mile walks followed by 30 minutes at the dog park on the weekends) as this may be difficult for the cardiovascular system to deal with.

Charleston Mobile Veterinary Services
IN PARTNERSHIP WITH SONOPATH VETERINARY ULTRASOUND

SonoPath FOSTERING THE ART OF VETERINARY MEDICINE
www.charlestonmobile.net
info@charlestonmobile.net
800.403.5408



Clinical Sonography & Telecytology
Educational Teleconsultation Services™

PATIENT

Lincoln Beers

SPECIES

Feline

BREED

Siamese

SEX

Neutered Male

AGE

6 Years

WEIGHT

5.8 kg

INTERPRETED BY

Brad Harris, DVM, DACVECC, Residency trained in cardiology

IMAGING PERFORMED BY

Andrea Nicastro, DVM, DACVIM

HOSPITAL NAME

Veterinary Specialty Care Blue Pearl Mt. Pleasant

REFERRING VET

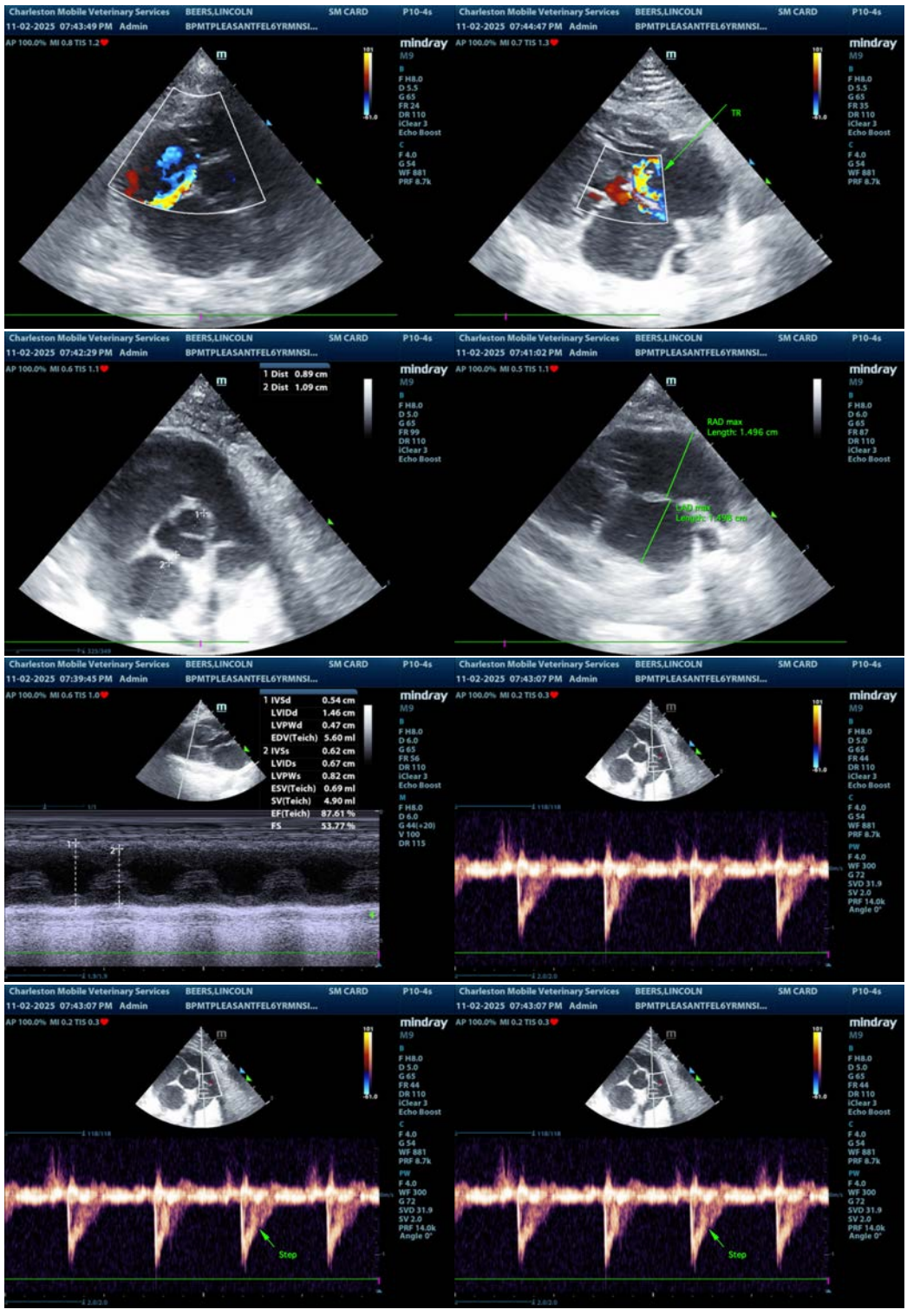
Dr. Danielle Frasier

INVOICE

71514

DATE

11/2/25



PATIENT

Lincoln Beers

SPECIES

Feline

BREED

Siamese

SEX

Neutered Male

AGE

6 Years

WEIGHT

5.8 kg

INTERPRETED BY

Brad Harris, DVM, DACVECC, Residency trained in cardiology

IMAGING PERFORMED BY

Andrea Nicastro, DVM, DACVIM

HOSPITAL NAME

Veterinary Specialty Care Blue Pearl Mt. Pleasant

REFERRING VET

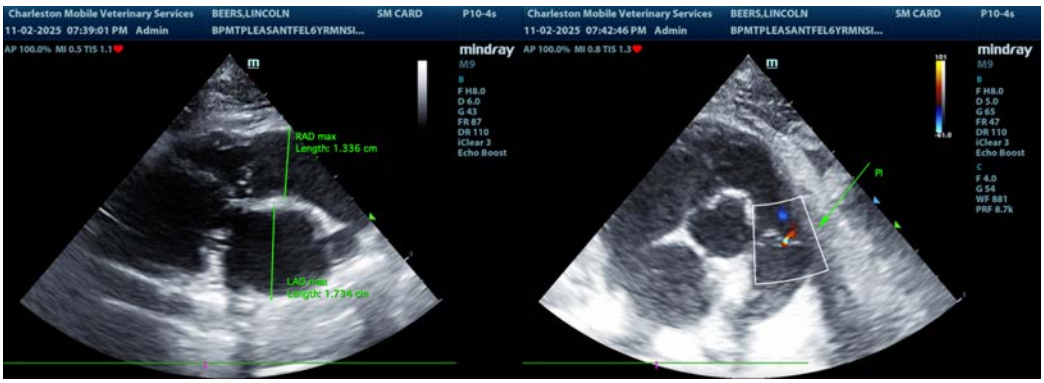
Dr. Danielle Frasier

INVOICE

71514

DATE

11/2/25



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.

Brad Harris, DVM, DACVECC, Residency trained in cardiology

info@SonoPath.com