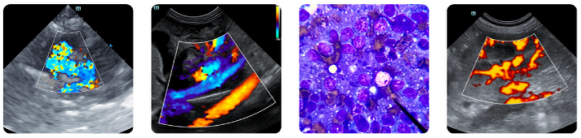


PATIENT
Cola Warren

SPECIES
Canine

BREED
Great Dane

SEX
Intact Female

AGE
22 months

WEIGHT
135 lbs

INTERPRETED BY
Bradley Harris, DVM, DACVECC, DACVIM (cardiology)

IMAGING PERFORMED BY
Chloe Lowe, CVT

HOSPITAL NAME
Branchville Conuty Veterinary

REFERRING VET
Dr. Talbot-Valerio

INVOICE
11846

DATE
4/30/2026

PRESENTING CLINICAL SIGNS

Tachycardia. Metronidazole, naraquin.

Abnormal PE/Chem/CBC/UA Results: BUN 34, Creat 2, SDMA 19, CA 11.5, Amyl 1420, PSL 524

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

CANINE CARDIAC PARAMETERS	BW	HR BPM	LAD 4 ch Long	RAD 4 ch Long	La/Ao Heart Base	LVIDd	LVIDs
NORMAL PARAMETER		50-100			<1.6		
PATIENT	61.36 kg	NM	6.53	3.57	1.9	4.92	4.33
CANINE CARDIAC PARAMETERS	**FS**	**EPSS**	**PV V MAX (m/s)**	**AV V Max (m/sec)**	**MR Vmax**	**TR Vmax**	**RPA distensibility (normal >30%)**
NORMAL PARAMETER	28-40	<0.6	0.7-1.6	0.7-1.7	4.5-5.5	< 2.7	
PATIENT	12	0.9	0.6	1.0	NM	NM	NM

Cardiac Presentation

The left atrium is mildly enlarged. The left ventricle is normal in dimension, with marginal systolic function. The right atrium and ventricle are normal in dimension, with normal systolic function. The anterior and posterior mitral valve leaflets are appropriately thin with adequate apposition, intact chordae, and there is no significant prolapse. There is mild mitral regurgitation identified. The tricuspid valve leaflets are appropriately thin with adequate apposition, intact chordae, with mild tricuspid regurgitation and no 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 appropriate main pulmonary artery diameter and right pulmonary artery distensibility. There is no pulmonic and no aortic valve insufficiency identified. There is no visible pericardial, pleural, or free peritoneal fluid documented. No evidence of hepatic venous congestion is noted. The cardiac chambers, pericardial and visible extra-cardiac regions were free of masses, spontaneous echo contrast, or thrombi.

ECG

A single lead rhythm strip is provided for review. A supraventricular tachyarrhythmia is noted with narrow QRS complexes. No overt P-waves are identified, but the R-R intervals are regular. This rhythm may represent atrial fibrillation at a fast rate, however other supraventricular tachycardias cannot be ruled out.

ULTRASONOGRAPHIC FINDINGS

- A supraventricular arrhythmia is noted. Supraventricular arrhythmias are most commonly associated with cardiac conditions that cause atrial enlargement; however, they can also be identified in patients with metabolic disease, wide variations in autonomic tone, congenital

PATIENT

Cola Warren

SPECIES

Canine

BREED

Great Dane

SEX

Intact Female

AGE

22 months

WEIGHT

135 lbs

INTERPRETED BY

Bradley Harris, DVM, DACVECC, DACVIM (cardiology)

IMAGING PERFORMED BY

Chloe Lowe, CVT

HOSPITAL NAME

Branchville Conuty Veterinary

REFERRING VET

Dr. Talbot-Valerio

INVOICE

11846

DATE

4/30/2026

conduction system abnormalities, and possibly intra-abdominal disease. The supraventricular arrhythmia suggests the presence of underlying structural heart disease. The enlarged left atrium and reduced systolic function may be a manifestation of this structural disease, however the absence of left ventricular dilation confounds this. This may also represent a form of tachycardia induced systolic dysfunction with the arrhythmia the primary underlying cause.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Consider also systemic diagnostics such as complete blood work, UA, and abdominal ultrasound if clinically indicated. Stress and anxiety could also cause very fast heart rates, if considered, can repeat the exam with the patient calmed or mildly sedated. Therapy for the tachycardia is likely warranted, to include diltiazem (1-3mg/kg TID). Additional therapy should be guided by the results of thoracic radiographs (diuretics and pimobendan may be necessary if there is evidence of pulmonary edema). Ideally, referral to a veterinary cardiologist is recommended for a full diagnostic ECG and further management.

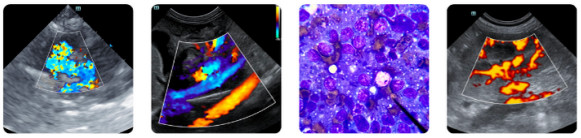
Anesthesia considerations:
Anesthesia should be avoided if possible. If anesthesia is necessary, then alpha-2 agonists, ketamine, high dose acepromazine, and Telazol should be avoided. If an ACE inhibitor (enalapril, benazepril) or spironolactone is being given, it should not be administered on the morning of general anesthesia. Other cardiac medications should be administered per the normal dosing schedule. Fluid therapy during anesthesia should be considered at a reduced rate (e.g., 5 ml/kg/hour) if possible (i.e., if not hypotensive). 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. Dobutamine (2.5-10 µg/kg/min as a CRI, starting at 2.5 µg/kg/min and increasing the dosage incrementally) may be used in lieu of fluid boluses to augment systemic blood pressure.

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. 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.

New Jersey Mobile
FUELED BY SONOPATH VETERINARY ULTRASOUND

SonoPath
FOSTERING THE ART OF VETERINARY MEDICINE™
www.SonoPath.com
info@sonopath.com
800.838.4268



Clinical Sonography & Telecytology
Educational Teleconsultation Services™

PATIENT

Cola Warren

SPECIES

Canine

BREED

Great Dane

SEX

Intact Female

AGE

22 months

WEIGHT

135 lbs

INTERPRETED BY

Bradley Harris, DVM, DACVECC, DACVIM (cardiology)

IMAGING PERFORMED BY

Chloe Lowe, CVT

HOSPITAL NAME

Branchville Conuty Veterinary

REFERRING VET

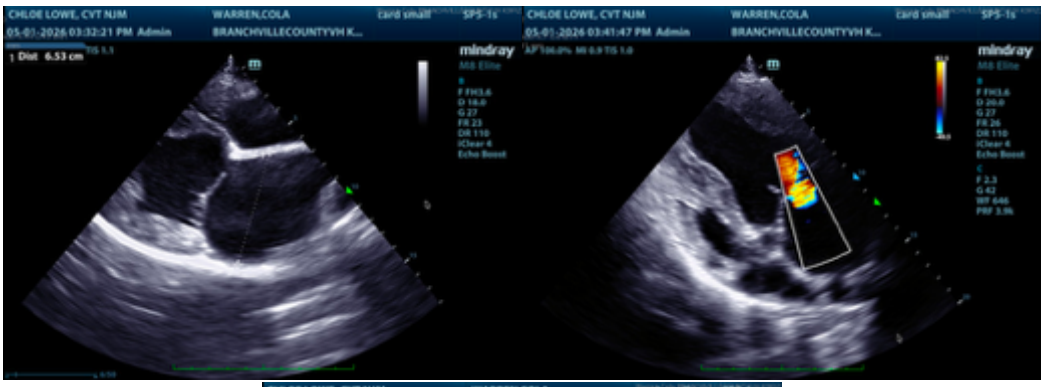
Dr. Talbot-Valerio

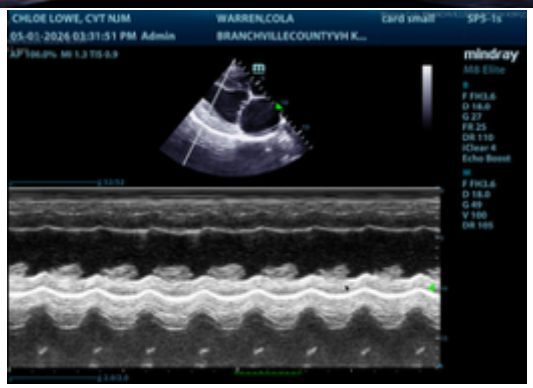
INVOICE

11846

DATE

4/30/2026





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