



PATIENT PRESENTING CLINICAL SIGNS

Todo Burgau

Todo presented for echo prior to proceeding with a dental cleaning/extractions. Diagnosed initially in 2019 with a grade 1/6 murmur, he was started on Benazepril 5mg PO on 2/4/2020. His murmur has progressed to a 5/6 most recently. His blood work in October 2021 was unremarkable. X-rays of the thorax were relatively unremarkable other than OA changes and slight enlargement of the mediastinum.

SPECIES

Canine

Abnormal PE/Chem/CBC/UA Results: PE: Grade 3/4 PDz, murmur 4-5/6, Lipomas on the chest/abd. Vitals ownl.

BREED

Yorkshire Terrier

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

SEX

Neutered Male

AGE

14 Years

WEIGHT

10.9 Pounds

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	--		1.15	1.3	30	90	0.1
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				
PATIENT	--	--	0.60		2.6	2.5	

INTERPRETED BY

Eric Lindquist, DMV DABVP, Cert. IVUSS

Cardiac Presentation

IMAGING PERFORMED BY

Dr. Chrissy Krell

HOSPITAL NAME

Paws & Prairie AC

REFERRING VET

Dr. Melissa Hensel

INVOICE

34120

DATE

1/11/22

The echocardiogram presented a prominent **right heart** with mild **right ventricular** hypertrophy, without significant **tricuspid** regurgitation, and normal **right atrial** size. No evidence of neoplasia was noted in the right auricle, or elsewhere in the heart. The **pulmonary artery** was uniformly prominent with mildly depressed pulmonic velocity measured on PW Doppler. No overt heartworms were noted in the main or visible deep pulmonary arteries. Yet, theoretically heartworms could be present in the deep pulmonary vasculature out of visible sonographic range. More likely, however, this prominent right heart is due to excessive intra-thoracic pressures caused by chronic respiratory disease or potentially excessive intra-thoracic fat (Pickwickian syndrome). The **left heart** demonstrated a linear **ventricular septum**. Contractility was functionally adequate demonstrated by the FS% measurement. The cranial and caudal **mitral** valve leaflets presented vegetative thickening consistent with endocardiosis. Mitral insufficiency was centralized and minor. No significant **left atrial** dilation was noted. The **left ventricular outflow** demonstrated normal flow patterns and velocities through the aortic valve. No evidence of tumor, pericardial or pleural effusion was noted. The visible **extra-cardiac** tissues were uniformly linear without evidence of masses, infiltrative or inflammatory mediastinal tissue. No evident arrhythmic activity was noted during the exam.

ULTRASONOGRAPHIC FINDINGS

- Stage B1 valvular disease with minor cor pulmonale pattern



PATIENT

Todo Burgau

SPECIES

Canine

BREED

Yorkshire Terrier

SEX

Neutered Male

AGE

14 Years

WEIGHT

10.9 Pounds

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUS

IMAGING PERFORMED BY

Dr. Chrissy Krell

HOSPITAL NAME

Paws & Prairie AC

REFERRING VET

Dr. Melissa Hensel

INVOICE

34120

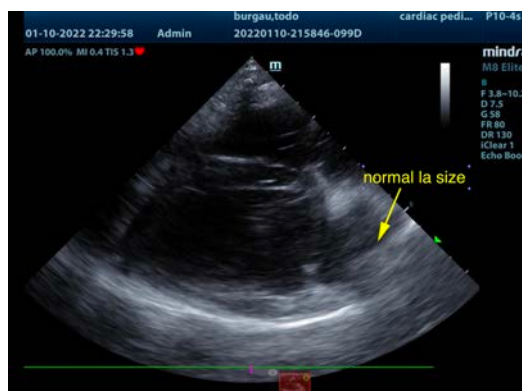
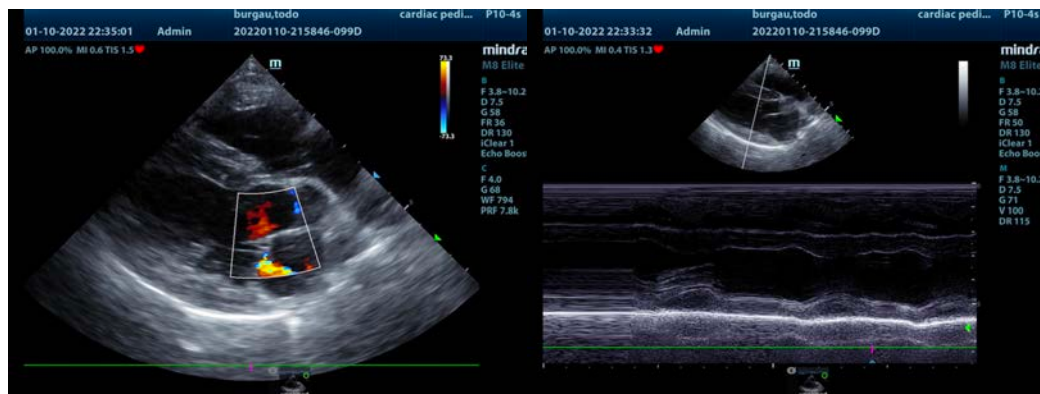
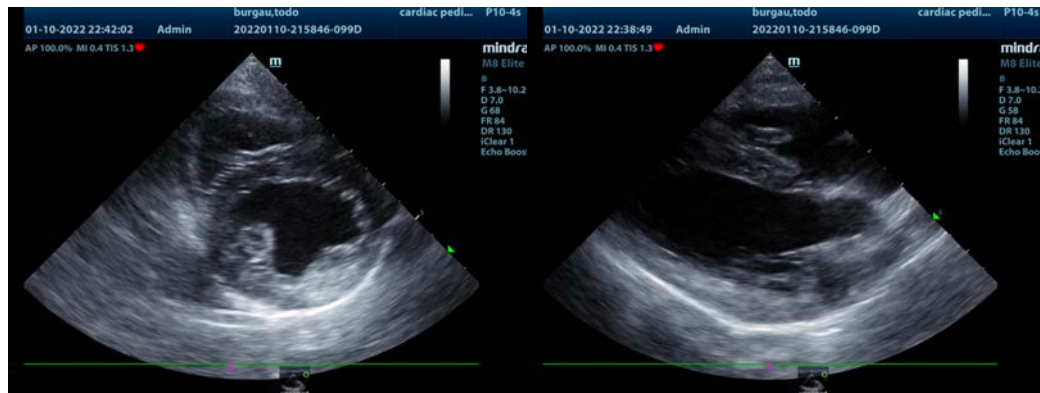
DATE

1/11/22

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Assessment for primary respiratory disease recommended given the minor right-sided enlargement, yet not a clinical issue. No contraindication to anesthetic procedure.

B1: The heart is stable without clinical disease. No overt contraindication for anesthesia of brief to moderate duration. I suggest Torbutrol premed, Propofol induction, Isoflor maintenance or similar protocol if anesthesia is desired. Blood pressure recommended if not already performed and target white coat negative systolic pressure of < 160 mmHg. If higher than this ACE-inhibitor is suggested to reach this level. Recheck echocardiogram is recommended in 6 months, earlier if murmur grade increases or clinical signs initiate.





PATIENT

Todo Burgau

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.

SPECIES

Canine

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.

BREED

Yorkshire Terrier

Eric Lindquist, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com

info@SonoPath.com

SEX

Neutered Male

AGE

14 Years

WEIGHT

10.9 Pounds

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

**IMAGING
PERFORMED BY**

Dr. Chrissy Krell

HOSPITAL NAME

Paws & Prairie AC

REFERRING VET

Dr. Melissa Hensel

INVOICE

34120

DATE

1/11/22