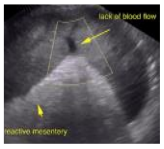
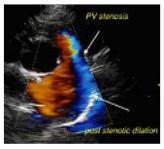
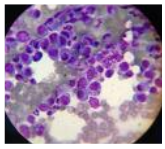
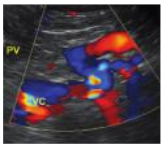
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT
Pepper Scott

SPECIES
Canine

BREED
Pug Mix

SEX
Female Spayed

AGE
14 yo

WEIGHT
15.3 lbs.

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

IMAGING PERFORMED BY
Meredith Swart

HOSPITAL NAME
Swart Veterinary Imaging

REFERRING VET
Meredith Swart

INVOICE
14704

DATE
8/25/22

PRESENTING CLINICAL SIGNS

-Recheck echo from July of last year. Patient possibly had episode of CHF earlier in the year. Possible low grade left side murmur. Chronic cough. Patient currently on hydrocodone syrup 1.5 ml po Q8-12 hours, vetmedin 2.5 mg tabs 1 tab am, 1/2 tab pm, lasix 20 mg tabs 1 tab Q8H, enalapril 2.5 mg tabs 1.5 tabs SiD. O reports cough is still present. Cough can be elicited on tracheal palpation
Abnormal PE/Chem/CBC/UA Results: ALP 444 otherwise WNL

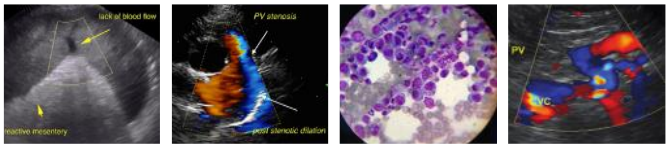
ULTRASONOGRAPHIC EXAMINATION OF THE HEART

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	<1.3	28-40	40-100	<0.6
PATIENT			1.4	1.4	53	94	0.2
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	NM	1.2	0.8		2.3	2.3	

Cardiac Presentation

The echocardiogram in this patient demonstrated normal **left atrial** size based on 3 separate methods of LA evaluation. The cranial and caudal **mitral** valve leaflets presented normal linear structure, extension in systole, and union in diastole with normal kinesis. No overt MR on doppler. The **left ventricle** presented thicknesses with linear contour and was not dilated nor restricted. 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. **Tricuspid** valvular assessment demonstrated adequate linear morphology and kinesis. No overt TR on doppler. The **right ventricle** was of normal size (1/3 diameter of LV), chordae structure, myocardial echogenicity and thickness. **Pulmonary outflow** 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. The cranial **mediastinum and pericardial and extra-cardiac regions** were free of masses in the visible window.

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
SonoPath.com
1-800-838-4268 info@sonopath.com



PATIENT

Pepper Scott

SPECIES

Canine

BREED

Pug Mix

SEX

Female Spayed

AGE

14 yo

WEIGHT

15.3 lbs.

INTERPRETED BY

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

IMAGING PERFORMED BY

Meredith Swart

HOSPITAL NAME

Swart Veterinary Imaging

REFERRING VET

Meredith Swart

INVOICE

14704

DATE

8/25/22

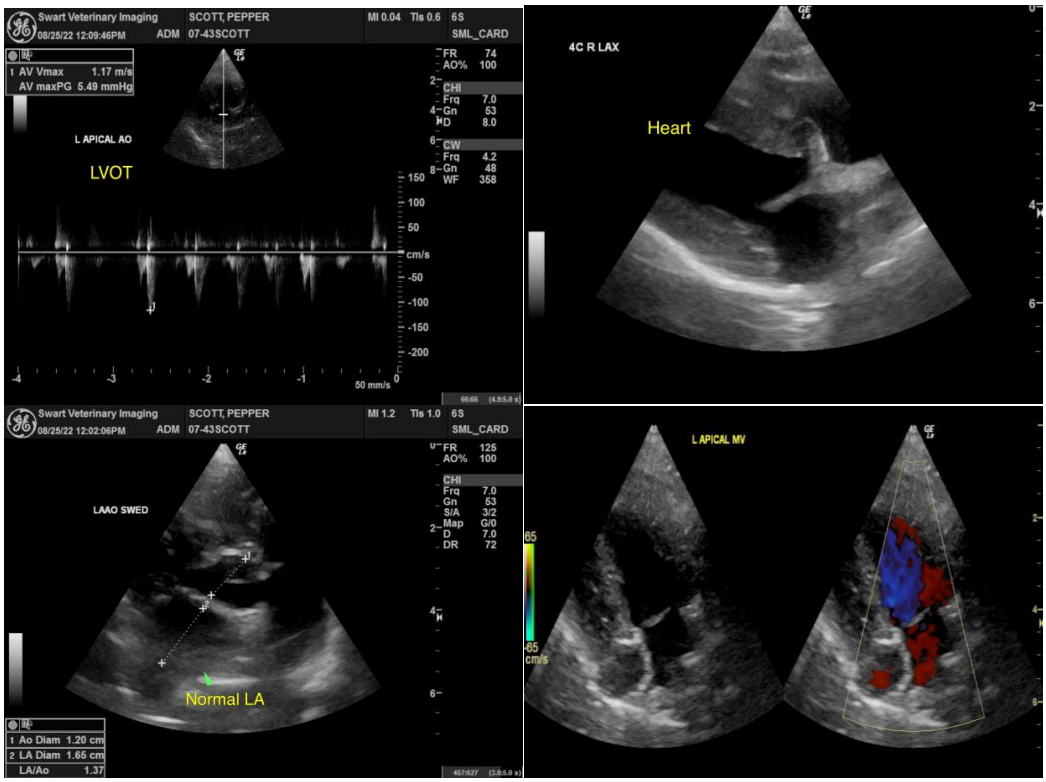
ULTRASONOGRAPHIC FINDINGS

- Normal echocardiogram

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

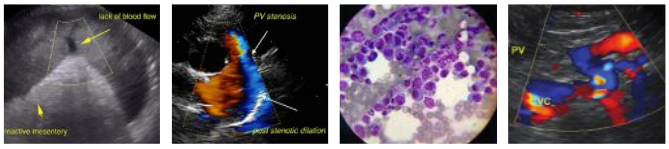
No evidence of structural or functional cardiomyopathy including no overt evidence of MR/TR, LV systolic dysfunction, or clinical pulmonary hypertension. The possibility of minor non-visualized MR Is possible yet if present, the hemodynamic effects of the murmur appear to be minimal given the lack of left atrium enlargement or left heart volume overload.

Given the lack of structural or functional cardiomyopathy, the coughing in this patient is most likely noncardiogenic in origin. Primary lower airway disease may be considered. Without evidence of structural or functional cardiomyopathy in this study, cardiac medications are not overtly indicated in this patient. Noncardiogenic cough may also be supported with reported persistent coughing despite current cardiac medications. Primary respiratory therapy is recommended with assessment of clinical response and monitoring of three view chest radiographs. Recheck echocardiogram is suggested in 6 -12 months, sooner if low-grade murmur intensity increases or if clinical signs suggestive of cardiac disease, i.e., increased resting respiration rate, exercise Intolerance, etc., are noted.



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.

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT
Pepper Scott

SPECIES
Canine

BREED
Pug Mix

SEX
Female Spayed

AGE
14 yo

WEIGHT
15.3 lbs.

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

IMAGING PERFORMED BY
Meredith Swart

HOSPITAL NAME
Swart Veterinary Imaging

REFERRING VET
Meredith Swart

INVOICE
14704

DATE
8/25/22

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.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)
info@SonoPath.com