



PATIENT PRESENTING CLINICAL SIGNS

Waxy Woof Gang Rescue
Heart murmur present

SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE HEART

Canine

BREED

Golden Retriever

SEX

Female

AGE

5 Months

WEIGHT

35 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			NM	1.1	42.6	77	0.14
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	120	2.7	0.86		2.5	2.7	

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. The **left ventricle** presented overall normal thicknesses with subjective mild prominent IVS and LV free wall and without evidence of dilation or restriction. 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 mild turbulent flow with subjective normal aortic valve. 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. 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.

ULTRASONOGRAPHIC FINDINGS

- Probable mild subaortic stenosis

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Given the mildly elevated LVOT velocity and in light of breed, and without evidence of shunt, systolic dysfunction or other valvular insufficiencies, the cause of the murmur is most consistent with mild subaortic stenosis. This condition appears to be genetic in origin and may appear in the first year of life, as is suspected in this case. Due to likely genetic origin, this patient should not be bred. The estimated LVOT pressure gradient consistent with probable mild subaortic stenosis. At this time there is no

INTERPRETED BY

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

IMAGING PERFORMED BY

Dr. Gromalak

HOSPITAL NAME

SVS Imaging

REFERRING VET

Dr. Chughtai

INVOICE

33328

DATE

12/7/21



PATIENT

Waxy Woof Gang
Rescue

subjective secondary cardiomyopathy associated with the mild subaortic stenosis, although potential for very early LV hypertrophy is possible. It is recommended to perform recheck echocardiogram in 6 months with mild exercise restriction and monitoring for arrhythmias. No overt anesthetic contraindications given the overall normal cardiac structure and function. Suggested anesthetic protocol may include opioid or Benzodiazepine pre-med, induction with Propofol or Alfaxalone, and appropriate gas anesthesia with avoidance of alpha 2 agonists. Close monitoring for potential arrhythmias and blood pressure during anesthesia recommended.

SPECIES

Canine

BREED

Golden Retriever

SEX

Female

AGE

5 Months

WEIGHT

35 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Dr. Gromalak

HOSPITAL NAME

SVS Imaging

REFERRING VET

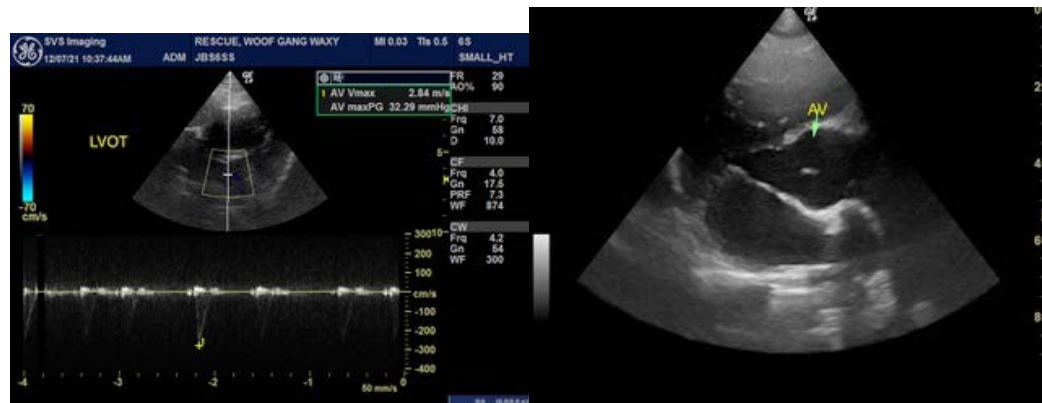
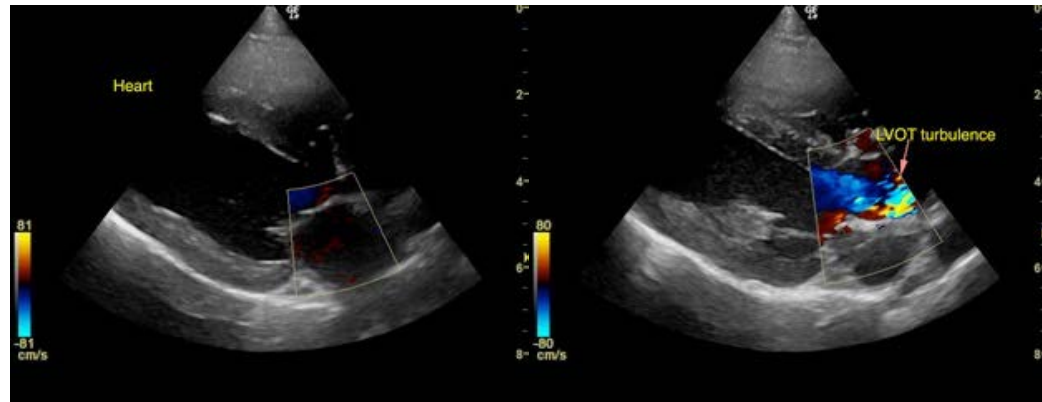
Dr. Chughtai

INVOICE

33328

DATE

12/7/21





PATIENT

Waxy Woof Gang
Rescue

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

Golden Retriever

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

SEX

Female

AGE

5 Months

WEIGHT

35 Pounds

INTERPRETED BY

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

**IMAGING
PERFORMED BY**

Dr. Gromalak

HOSPITAL NAME

SVS Imaging

REFERRING VET

Dr. Chughtai

INVOICE

33328

DATE

12/7/21