



**PATIENT**

Lucy Hanson Police  
K9

**PRESENTING CLINICAL SIGNS**

History: Presented for spay. Grade II-III/VI heart murmur was heard. No clinical signs - healthy young dog. Echocardiogram prior to anesthesia for spay procedure.

**SPECIES**

Canine

**ECHOCARDIOGRAM FINDINGS**

2D, m-mode, color flow and Doppler imaging is available.

**Left ventricle:** The LV diameter is normal with adequate myocardial function. LV wall thicknesses are normal.

**BREED**

Golden Retriever

**Left atrium:** The left atrium is normal in dimension.

**Mitral valve:** The mitral valve is normal with no prolapse into the left atrial lumen. No mitral regurgitation.

**SEX**

Female

**Aortic valve/aorta:** The aortic valve is normal in morphology and mobility. Subtle narrowing of the LVOT. Mildly elevated aortic outflow velocity; laminar flow. No aortic insufficiency.

**AGE**

1 year

**Right ventricle:** Normal right ventricular diameter and morphology indicating no overt evidence of pulmonary arterial hypertension.

**Right atrium:** Normal RA dimension.

**Tricuspid valve:** The tricuspid valve appears normal with no tricuspid regurgitation.

**Pulmonic valve/pulmonary artery:** The pulmonic valve is normal in morphology and mobility. No pulmonic insufficiency. Normal RVOT velocity; laminar flow.

**WEIGHT**

52.6lbs

**Pericardium/other:** No pericardial or pleural effusion noted. No obvious cardiac masses.

**Heart rhythm:** ECG reveals a sinus rhythm with an average HR of 90bpm.

**2-Dimensional Measurements**

**Doppler Measurements**

**INTERPRETED BY**

Maggie Machen  
Lamy, DVM  
DACVIM (Cardiology)

Ao diam (cm)	2.3
LA diam (cm)	2.5
LA:Ao (Swe)	1.1
IVS thickness (cm)	0.9
LVID diastole (cm)	3.9
PW thickness (cm)	1.0
LVID systole (cm)	2.1
FS (%)	45

PV Vmax (m/s)	1.5
AoV Vmax (m/s)	2.5
MR Vmax (m/s)	NA
TR Vmax (m/s)	NA
TR PG (mmHg)	NA

**IMAGING**

**PERFORMED BY**

Pamela Harrigan,  
RDCS

**INTERPRETATION OF THE FINDINGS**

The only cause of a murmur identified is increased flow velocity through the LVOT/aortic root. A subtle narrowing of the LVOT is noted which is likely indicative of a hypoplastic root. No obvious subaortic ridge or valvular abnormalities are visualized, and in the absence of structural abnormalities this is considered a benign flow murmur that is of little hemodynamic consequence. If this is a new murmur, it is reasonable to monitor periodically via recheck echocardiography in the future. No significant valvular insufficiencies were noted, and no structural issues identified.

**HOSPITAL NAME**

VCA Hanson Animal  
Hospital

**REFERRING VET**

Dr. Oscar

**INVOICE**

30521

While this particular condition will not affect this patient quality or quantity of life, a velocity of >2.2m/s is technically past the cut-off for recommended breeding animals. I would avoid breeding this patient based upon this finding. If there is any question, an OFA breed screening exam is considered the gold standard.

**DATE**

5/1/23



**PATIENT**

Lucy Hanson Police  
 K9

Prognosis is good.

**SPECIES**

Canine

**RECOMMENDATIONS**

- No cardiac medications are indicated.
- Consider an OFA if the patient is attended for breeding.
- No cardiac contraindication for general anesthesia.
- Monitor for development of a cough, labored breathing, exercise intolerance or collapse episodes.

**BREED**

Golden Retriever

**PLAN**

Recommend recheck echocardiogram in 12-18 months to screen for any progressive issues or development of concurrent cardiac disease that the preexisting murmur may mask.

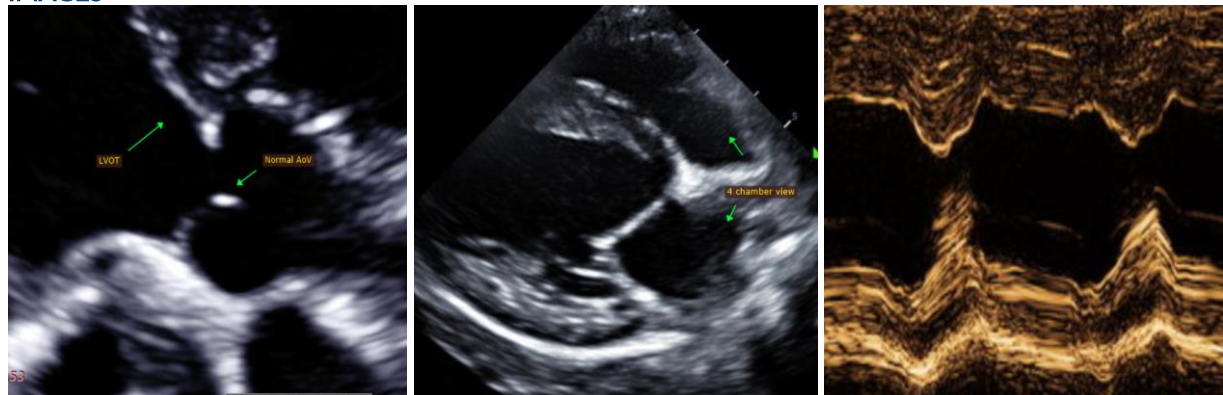
**SEX**

Female

**IMAGES**

**AGE**

1 year



**WEIGHT**

52.6lbs

**INTERPRETED BY**

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 Lamy, DVM  
 DACVIM (Cardiology)

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.

**IMAGING PERFORMED BY**

Pamela Harrigan,  
 RDCS

Thank you for this referral. This report was generated using transcription software, and minor dictation errors may be present. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance, please contact me.

**HOSPITAL NAME**

VCA Hanson Animal  
 Hospital

**Maggie Machen Lamy, DVM**  
**Diplomate of the American College of Veterinary Internal Medicine (Cardiology)**  
 info@sonopath.com

**REFERRING VET**

Dr. Oscar

Echocardiogram performed by: Pamela Harrigan, RDCS  
 Pet Animal Ultrasound Service ([4paus.com](http://4paus.com))

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