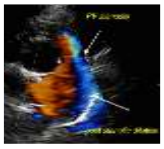
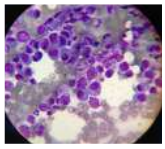
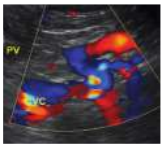
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

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

PATIENT

Felix Kim Shohola

SPECIES

Canine

BREED

Dachshund

SEX

MN

AGE

13 years

WEIGHT

15/8 lbs.

INTERPRETED BY

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

IMAGING PERFORMED BY

SHari Reffi, CVT

HOSPITAL NAME

Shohola AH

REFERRING VET

Dr. Gramazio

INVOICE

13369

DATE

2/16/22

PRESENTING CLINICAL SIGNS

Recheck echo from six months ago, coughing getting a little worse. Current meds: Lasix 20mg bid, Enalapril 5mg sid, Vetmedin 5mg 1/2 tab bid
Abnormal PE/Chem/CBC/UA Results: none

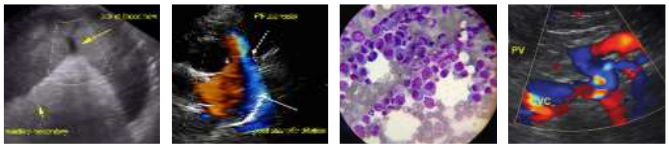
ULTRASONOGRAPHIC EXAMINATION OF THE HEART

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	<1.6	28-40	40-100	<0.6
PATIENT	5.1	3.0	1.95	2.3	40.3	71.7	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	BELOW	BELOW	BELOW	BELOW
PATIENT	131	1.98	1.37		4.45	3.8	

Cardiac Presentation

The echocardiogram in this patient demonstrated severely enlarged **left atrial** size based on 3 different LA measurement methods. Deviation of the interatrial septum towards the right atrium consistent with elevated left atrial pressure was present. The cranial and caudal **mitral** valve leaflets presented vegetative thickening consistent with endocardiosis with mild prolapse of the septal leaflet. Doppler indicated measurable moderate to severe eccentric insufficiency. The **left ventricle** presented thicknesses with linear contour with progressive increased left ventricle volume. 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 systolic laminar flow and subjective structural integrity. Color doppler assessment revealed AV insufficiency measuring 2.9 cm end-diastolic velocity. The **right atrium** and auricle revealed normal size, structure and content. No evidence of masses was noted or chamber overload. **Tricuspid** valvular assessment demonstrated mild thickening with mild TV Insufficiency. The **right ventricle** was of normal size (1/3 diameter of LV), chordae structure, myocardial echogenicity and thickness. **Pulmonic** 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. No echographically detectable evidence of infiltrative disease was visible. The cranial **mediastinum and pericardial 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

Felix Kim Shohola

SPECIES

Canine

BREED

Dachshund

SEX

MN

AGE

13 years

WEIGHT

15/8 lbs.

INTERPRETED BY

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

IMAGING PERFORMED BY

SHari Reffi, CVT

HOSPITAL NAME

Shohola AH

REFERRING VET

Dr. Gramazio

INVOICE

13369

DATE

2/16/22

ULTRASONOGRAPHIC FINDINGS

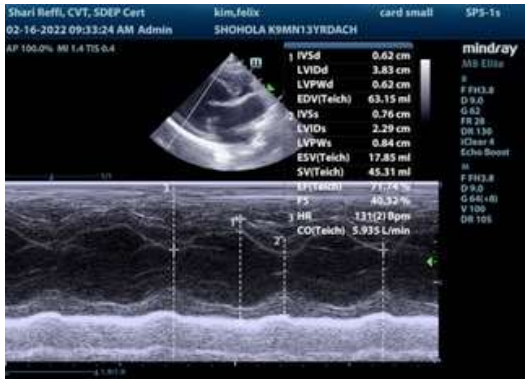
- Chronic mitral valve disease with septal leaflet prolapse (ACVIM Stage-C) - subjective mild progressive since previous ultrasound
- TR - estimated pulmonary pressure gradient (approximately 36 mmHg), consistent with elevated pulmonary pressure
- Aortic valve Insufficiency

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

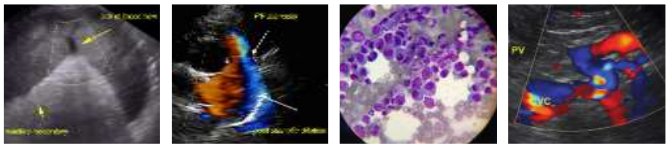
BP to assess for hypertension in light of AV insufficiency is recommended. Monitoring of renal parameters and resting RR is recommended.

Continuation of triple therapy is warranted in this patient with recommended diuretic combination including the current dose of Lasix with the addition of Spironolactone 1.0-2.0 mg/kg PO BID. The coughing in this patient may be multifactorial owing to potential congestion, mainstem bronchi irritation, or compression owing to LA enlargement. Hydrocodone or similar is recommended given the progressive cough.

The estimated pulmonary pressure gradient is suggestive of low-grade pulmonary hypertension. Exercise restriction is advised. Mild salt restriction and Omega 3 Fatty Acids may be of benefit. Recheck echocardiogram is suggested in 4-6 months, sooner if persistent / progressive coughing or clinical signs suggestive of either decompensating left heart disease or pulmonary hypertension.



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT

Felix Kim Shohola

SPECIES

Canine

BREED

Dachshund

SEX

MN

AGE

13 years

WEIGHT

15/8 lbs.

INTERPRETED BY

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

IMAGING PERFORMED BY

SHari Reffi, CVT

HOSPITAL NAME

Shohola AH

REFERRING VET

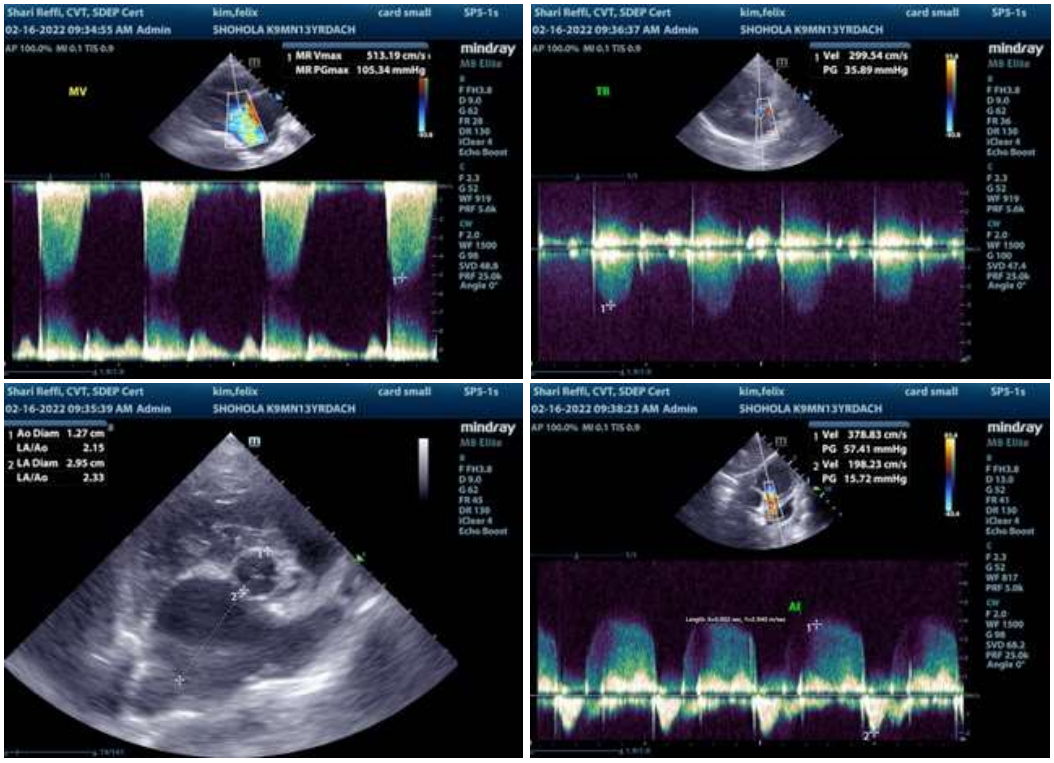
Dr. Gramazio

INVOICE

13369

DATE

2/16/22



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.

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