



**PATIENT PRESENTING CLINICAL SIGNS**

Bella Kessler History: heart murmur grade 2, pre anest

**SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

Canine

**BREED**

Cocker Spaniel

**SEX**

Female

**AGE**

10 years

**WEIGHT**

22 lbs

The echocardiogram in this patient demonstrated normal **left atrial** size based on 3 different LA measurement methods. Chamber volumes and echogenicity were normal. The cranial and caudal **mitral** valve leaflets presented vegetative thickening consistent with endocardiosis. Doppler indicated measurable insufficiency. 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 was structurally unremarkable, however, increased outflow velocity was evident. This is likely a compensatory issue. The **right atrium** and auricle revealed normal size, structure and content. No evidence of masses was noted or chamber overload. Trivial **tricuspid** insufficiency was noted. 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. Arrhythmogenic activity was noted during the exam. This may be sinus arrhythmia.

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Valeryia Shumskaya

**HOSPITAL NAME**

Lake Hopatcong AC

**REFERRING VET**

Dr. Batta

**INVOICE**

43657

**DATE**

4/3/23

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (Boon method)	LA/AO (Heart Base)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.6	28-40	40-100	<0.6
PATIENT			NM	1.32	35	66	0.2
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT	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		2.4	1.03	22 lbs	3.0 max	2.35	



**PATIENT**

Bella Kessler

**ULTRASONOGRAPHIC FINDINGS**

Idiopathic increased LVOT and trivial mitral and tricuspid insufficiency.

Periodic arrhythmic activity was noted in this patient.

**SPECIES**

Canine

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**BREED**

Cocker Spaniel

If the murmur is an ejection type murmur it is likely deriving from the LVOT. EKG is indicated prior to surgery. Holter monitor is recommended if any clinical signs of lethargy are an issue. There is no overt contraindication to anesthetic procedure as long as blood pressure and EKG are benign. Recheck echocardiogram is recommended in a year or earlier if murmur grade increases.

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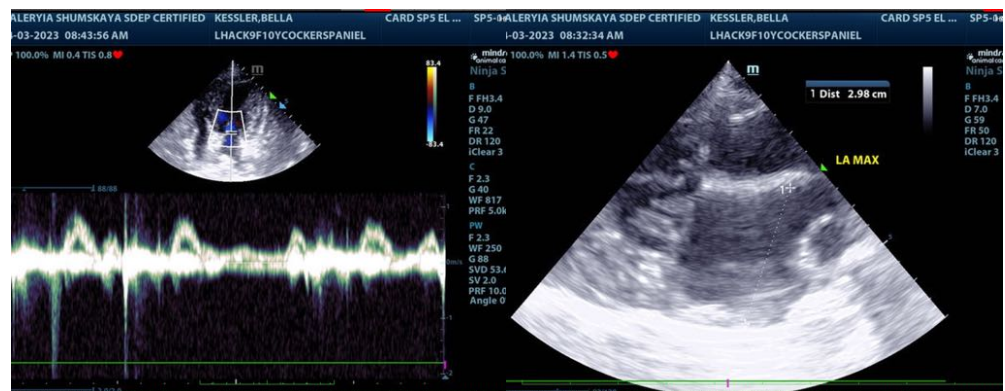
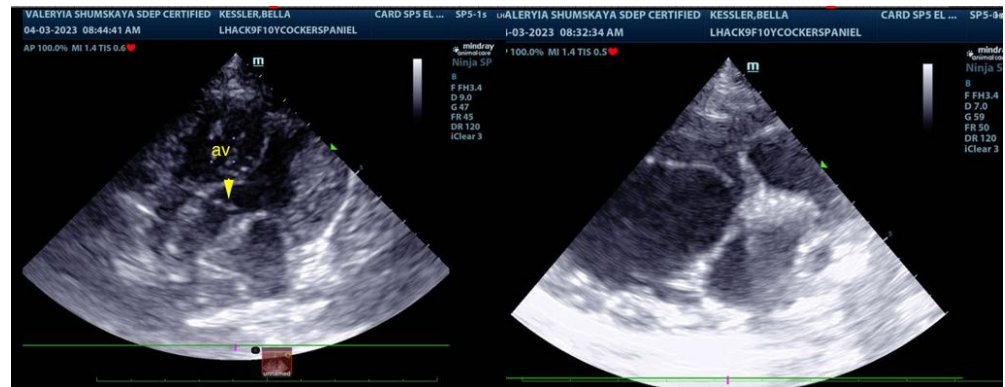
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**SPECIES**

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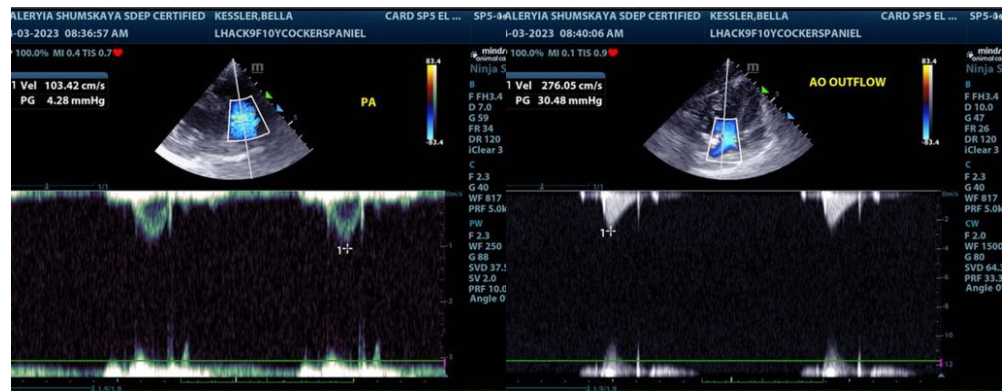
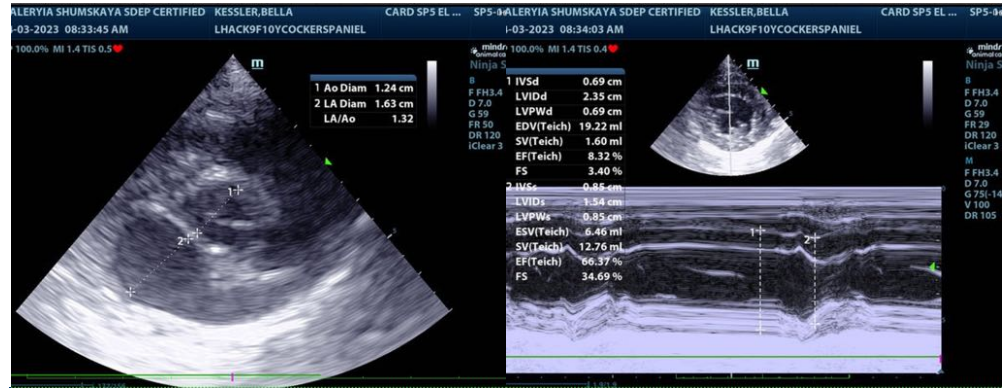
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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