
**PATIENT**

Tomalina Chopra

**SPECIES**

Canine

**BREED**

Min Pin

**SEX**

FS

**AGE**

12 years

**WEIGHT**

4.8 kg

**INTERPRETED BY**

 R. McKenzie Daniel,  
 DVM, DABVP

**IMAGING  
 PERFORMED BY**

Crystal Hill

**HOSPITAL NAME**

Snelgrove VS

**REFERRING VET**

Dr. Loannou

**INVOICE**

13249

**DATE**

2/3/22

**PRESENTING CLINICAL SIGNS**

Coughing Heart is difficult to see as there appears to be fluid in her lungs predominantly in the cranioventral quadrant and along the sternum There is also a mass effect in the cranioventral/mediastinal quadrant I am concerned about neoplasia. Caninsulin.

Abnormal PE/Chem/CBC/UA Results: last full blood done in August - besides being a diabetic, all else NAF. Concerns from Rads about mass effect/ fluid in lungs.

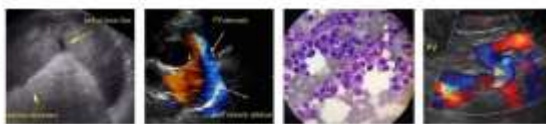
**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

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				1.1	41.2	75.4	N0.2
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	119	1.5	1.3		2.0	1.7	

**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 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 subjective adequate linear morphology and kinesis. Minor TR was present. The **right ventricle** exhibited subtle prominent size compared to the right ventricle with normal myocardial echogenicity and thickness. **Pulmonary outflow** tract assessment revealed normal valve structure, laminar flow, and diameter (approx. 1:1 pa/ao ratio). Large, expansive, hypoechoic to nonhomogeneous mass occupying the majority of the subjective right and cranial thorax was present. The mass measured 7.0-8.0 cm in diameter but likely larger as the entire mass would not fit into a single viewing window and was visualized in multiple mid


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to cranial thoracic views. Potential small areas of intra-mass cystic component or possible cavitation were noted. Evidence of significant pleural effusion was not present, although potential for small pockets of scant pleural effusion is suspected.

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**ULTRASONOGRAPHIC FINDINGS**

- Overtly normal cardiac structure and function
- Large thoracic mass subjectively occupying the majority of right to cranial thorax

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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**
**SEX**

FS

Although sampling is required for a definitive diagnosis, the thoracic mass is most likely consistent with neoplastic criteria. Assuming normal clotting status, ultrasound-guided FNA of the mass using a 25-gauge needle would be warranted for screening cytology. Thoracic CT is likely ideal for further clarification. No indication for cardiac medications was evident. As-needed respiratory support and antitussive medication are recommended.

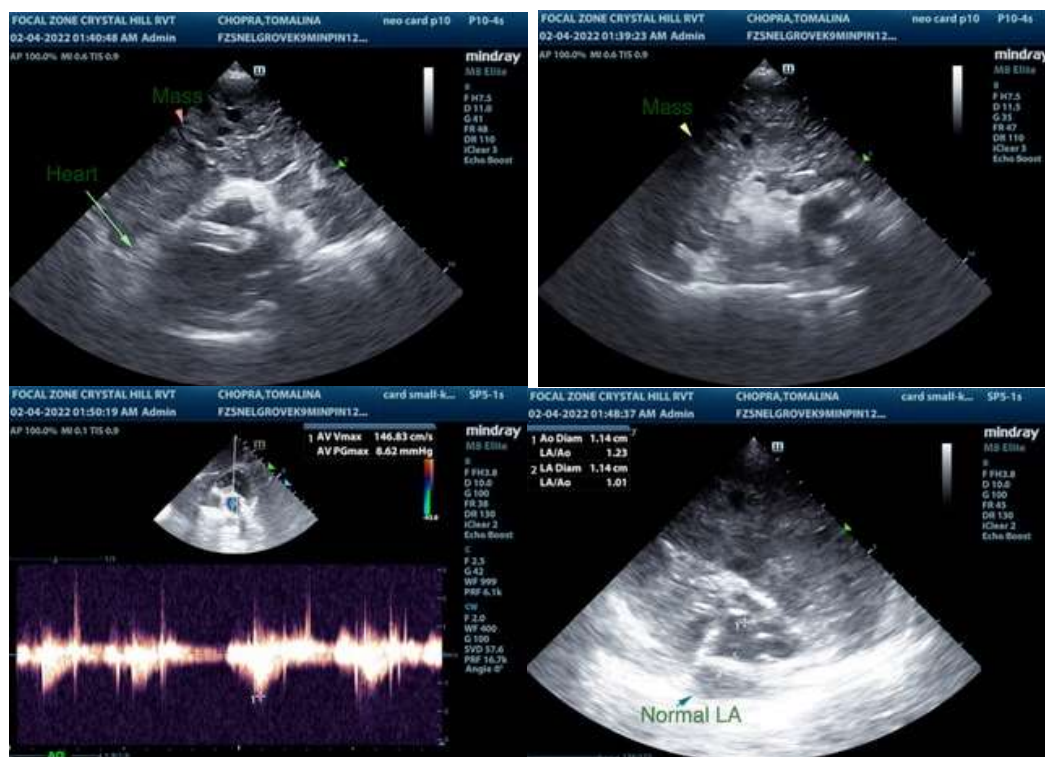
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology



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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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**info@SonoPath.com**

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