


**PATIENT**

Princess Campbell

**PRESENTING CLINICAL SIGNS**

Acute onset of decreased appetite and rapid shallow breathing . Some abdominal distention. Previous history of hepatic shunt surgery.

**SPECIES**

Canine

Abnormal PE/Chem/CBC/UA Results: Bloodwork within normal limits. No neoplastic cells found on fluid cytology

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**
**BREED**

Terrier Mix

**SEX**

FS

**AGE**

8

**WEIGHT**

13

| 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                 | <1.3                    | 28-40                           | 40-100                                   | <0.6                                     |
| PATIENT                   |               |               |                     | 1.4                     | 52                              | 86                                       | 0.1                                      |
| 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                   | NM            | NM            | 0.9                 |                         | 1.9                             | 1.7                                      |  |

**INTERPRETED BY**

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

**Cardiac Presentation**

Moderate volume pericardial effusion with evidence of diastolic collapse of the right atrial wall consistent with cardiac tamponade was present. Subjective ill-defined thickened right atrioventricular groove exhibiting mild non-homogenous myocardial echogenicity was present measuring ~ 1.5 cm in diameter. LV function was adequate. The LA was normal to subnormal in diameter without evidence of LA enlargement. The left ventricle exhibited normal volume with possible minor pseudohypertrophy and normal LV function as evidenced by the FS measurement. No overt pathology associated with the pulmonic or aortic valves was present. Normal measured RVOT velocity was present. No overt arrhythmia present.

**IMAGING PERFORMED BY**

Dr. Nelson

**HOSPITAL NAME**

 Valley Veterinary  
 Service

**ULTRASONOGRAPHIC FINDINGS**

- Moderate volume pericardial effusion with evidence of secondary tamponade.
- Subjective ill defined thickened right atrioventricular groove-possible ill defined small mass lesion.

**REFERRING VET**

Dr. Nelson

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The likely cause of the patient's overall clinical signs is cardiac tamponade due to pericardial effusion. A definitive cause of the pericardial effusion was not obvious. When small, a cardiac mass may be difficult to visualize and is a likely be a primary consideration especially if the pericardial effusion is hemorrhagic in nature. Other causes of pericardial effusion i.e., inflammatory/infectious disease, coagulopathy, trauma etc. cannot be definitively excluded. Referral for pericardiocentesis is recommended. Fluid resuscitation as needed may be indicated given potential for mild LA hypovolemia and potential for mild LV pseudohypertrophy. Prognosis is very guarded with concern for underlying

**INVOICE**

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**DATE**

04/17/2023



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cardiac neoplastic criteria. OTC herbal supplement Yunnan Baiao may be considered if hemorrhagic pericardial effusion is present.

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Canine

**BREED**

Terrier Mix

**SEX**

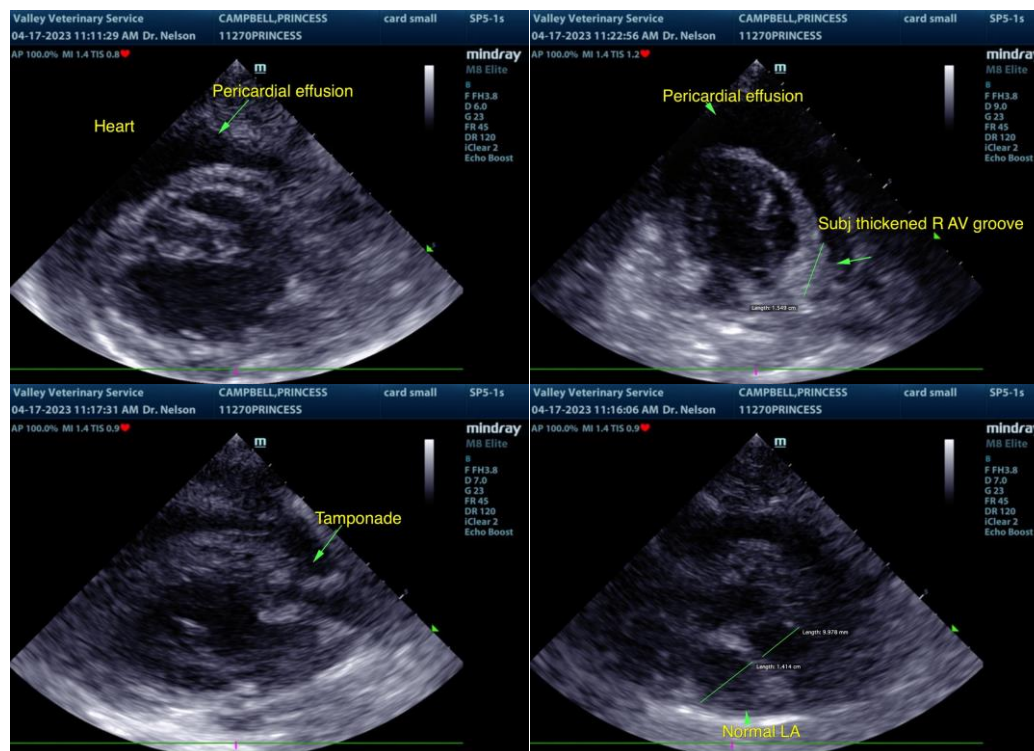
FS

**AGE**

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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.

**IMAGING PERFORMED BY**

Dr. Nelson

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**HOSPITAL NAME**

Valley Veterinary Service

**REFERRING VET**

Dr. Nelson

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