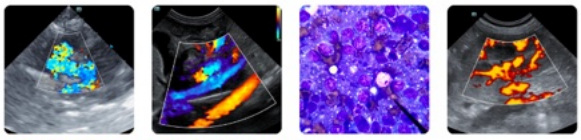


DATE

6/4/26

PATIENT

Bodhi Hannah

SPECIES

Canine

BREED

Chihuahua Mix

SEX

Neutered male

AGE

1/14/18

WEIGHT

9 lbs

INTERPRETED BY

Bradley Harris, DVM, DACVECC, DACVIM (cardiology)

HOSPITAL NAME

Falls Road AH

REFERRING VET

Dr. Hayward

INVOICE

78368

PRESENTING CLINICAL SIGNS

History: P originally experiencing loss of appetite and lethargy. No murmur. P received echo on 5/12 following discovery of pleural and pericardial effusion. Follow-up echo and abd. u/s recommended by cardiologist.
Pertinent abnormal PE/Chem/CBC/UA Results: Labwork not attached.
Current medications: Yunnan baiyao BID long-term. Started 5/13
Blood Pressure: N/A.
Sedation used: Not required to complete full diagnostic ultrasound.
Pertinent previous ultrasound results: 5/12/26. See attached.
STAT: Declined at this time.
Imaging performed by: Stephanie Warga RDCS, RVT.

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

The left atrium is normal in dimension. The left ventricle is normal to small in dimension with normal systolic function and mild intraventricular septal flattening. The right atrium is dilated but displays evidence of diastolic collapse/compression. The right ventricle is small in dimension. The cranial aspect of the right auricular appendage and atrioventricular wall has a static lesion with cavitation and mixed echogenicity that appears to involve the tricuspid valve, and may be resulting in an inflow obstruction/stenosis. The anterior and posterior mitral valve leaflets presented normal linear structure, extension in systole, and union in diastole without prolapse or myxomatous changes noted. There is severe pericardial, no pleural, and free peritoneal fluid noted. The remaining cardiac chambers and visible extra-cardiac regions were free of masses, spontaneous echo contrast, or thrombi.

CANINE CARDIAC PARAMETERS	Body Weight kg	HR BPM	LAD 4 ch Long	RAD 4 ch Long	La/Ao Heart Base	LVIDd	LVIDs
NORMAL PARAMETER		50-100			<1.6		
PATIENT	4.09 kg	180	1.74	1.33	1.39	1.52	0.66
CANINE CARDIAC PARAMETERS	**FS**	**EPSS**	**PV V MAX (m/s)**	**AV V Max (m/sec)**	**MR Vmax**	**TR Vmax**	**RPA distensibility (normal >30%)**
NORMAL PARAMETER	28-40	<0.6	0.7-1.6	0.7-1.7	4.5-5.5	< 2.7	
PATIENT	57	NM	2.3	1.5	3.5	NM	NM

ULTRASONOGRAPHIC FINDINGS

These findings identify pericardial effusion in the setting of a mass lesion in the wall of the right atrium. The location/appearance of the mass is consistent with hemangiosarcoma. The pericardial effusion is most likely neoplastic in origin.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

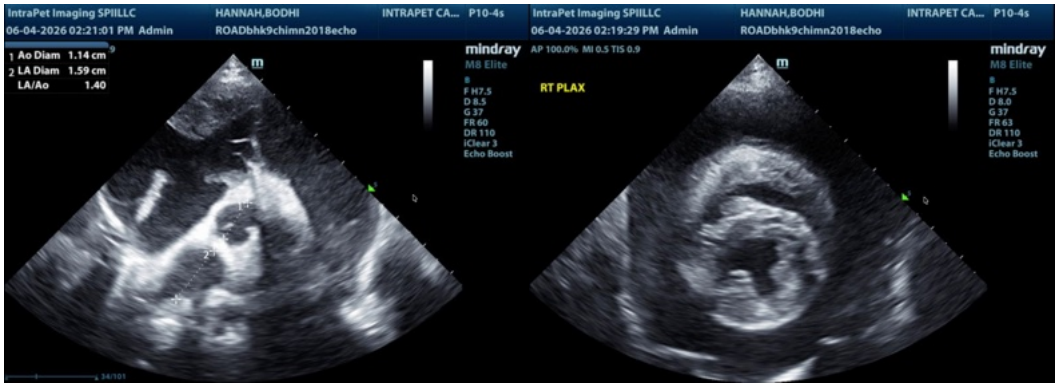
There is a therapeutic benefit to tapping the pericardium again as there is concern for cardiac tamponade. At this time, there may be merit to considering surgical intervention, either by taking the entire pericardium (subtotal pericardiectomy), or creation of a smaller hole via approaches less invasive than a median

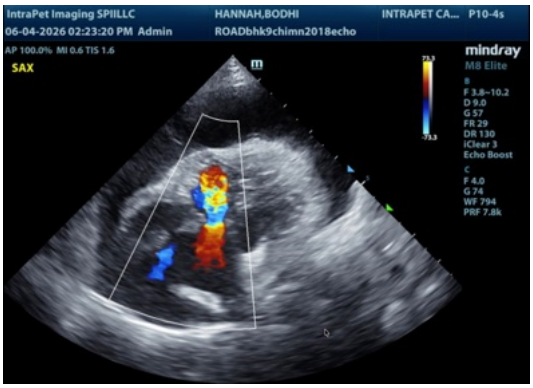
sternotomy. The value of surgery is simply to avoid the effects of recurrent effusion and need for multiple taps, as well as to evaluate the lesion. Unfortunately surgery does not alter the natural course of disease, which usually only affords a prognosis of a few months. Prior to considering surgery, an echocardiographic contrast study (bubble study) should be considered to evaluate for communication between the right heart and pericardium. In which case a pericardiectomy could be life threatening. Regardless of the therapeutic avenue elected, prognosis would be considered poor to grave, and it is important that quality of life is maintained.

Anesthesia considerations:
Anesthesia should ideally be avoided until any signs of CHF and pericardial effusion have resolved. If anesthesia is necessary, then alpha-2 agonists, ketamine, high dose acepromazine, and Telazol should be avoided. Fluid therapy is often necessary in the setting of cardiac tamponade to improve venous return. A shorter anesthetic duration will reduce the risk of complications. Pre-oxygenation is advised. Premedication with an opioid (e.g., butorphanol, hydromorphone, oxymorphone) with or without a benzodiazepine is generally the safest protocol. An induction agent such as Propofol, alfaxalone, or diazepam/etomidate can be used to effect. Maintenance of anesthesia with isoflurane or sevoflurane is reasonable.

Diet:
No special considerations are necessary. Any high-quality food from Hills, Royal Canin, Science Diet, Eukanuba, Iams, or Purina is reasonable.

Activity:
Moderate physical activity (meandering walks, exploring the back yard, playing with toys inside, getting excited when family gets home, etc.) is encouraged, but periods of strenuous aerobic activity (jogging, strenuous outdoor ball play, prolonged play at the dog park, etc.) should be avoided, especially during periods of high heat (> 80 F) and humidity. Dogs with heart disease tend to tolerate cool and cold temperatures much better than high temperatures. Avoid sudden increases in activity (e.g. 2 block walks during the week but 2 mile walks followed by 30 minutes at the dog park on the weekends) as this may be difficult for the cardiovascular system to deal with.





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.

Bradley Harris, DVM, DACVECC, DACVIM (cardiology)
info@SonoPath.com