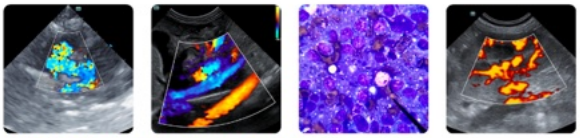




SonoPath www.carolinavetmobile.com
info@carolinavetmobile.com 800.808.5948

**PATIENT**

Linus Jones

**SPECIES**

Canine

**BREED**

Beagle

**SEX**

Neutered male

**AGE**

9 years

**WEIGHT**

29.6 lbs

**INTERPRETED BY**

Bradley Harris, DVM, DACVECC, DACVIM (cardiology)

**IMAGING PERFORMED BY**

Kathleen Byrnes

**HOSPITAL NAME**

Animal Clinic Madison Mayodan

**REFERRING VET**

Dr. McKinlay

**INVOICE**

71978

**DATE**

2/26/26

## PRESENTING CLINICAL SIGNS

P presented for distended abd. Fluid present. Albumin low. Heart enlarged on rads. Concern for PLE vs Heartbase mass

## ULTRASONOGRAPHIC EXAMINATION OF THE HEART

The left atrium is normal in dimension. The left ventricle is normal in dimension with normal systolic function. The right atrium and ventricle are subjectively normal in dimension and display evidence of diastolic collapse/compression. The anterior and posterior mitral and tricuspid valve leaflets presented normal linear structure, extension in systole, and union in diastole without prolapse or myxomatous changes noted. There is no significant mitral or tricuspid valve regurgitation noted. The left ventricular outflow tract demonstrated normal laminar flow and the visible aorta is unremarkable. The right ventricular outflow tract assessment revealed normal laminar flow, and appropriate diameter and distensibility. There is no evidence of semilunar valve insufficiency. There is moderate pericardial, no pleural, and moderate free peritoneal fluid noted. There is a hyperechoic mass effect mass at the heart base in the periaortic region. 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 | 13.45 kg | 160 | 2.52 | 2.64 | 1.39 | 2.5 | 1.43 |
| **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 | 43 | 0.3 | 0.9 | 1.2 | NM | NM | NM |

## ULTRASONOGRAPHIC FINDINGS

- These findings identify pericardial effusion in the setting of a mass lesion in the peri-aortic region. The location/appearance of the mass is consistent with chemodectoma. The pericardial effusion is most likely neoplastic in origin.

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is a therapeutic benefit to tapping the pericardium (if there is enough fluid). Evaluation of the fluid will occasionally be of diagnostic value, but in most cases the results are simply compatible with hemorrhage. If it is chemodectoma, the prognosis is variable, as recurrent effusions are likely. Ideally, an abdominal ultrasound should be considered to identify evidence of neoplasia elsewhere in the body, which (or may not) affect prognosis. If no additional masses can be identified, there may be merit to

**PATIENT**

Linus Jones

**SPECIES**

Canine

**BREED**

Beagle

**SEX**

Neutered male

**AGE**

9 years

**WEIGHT**

29.6 lbs

**INTERPRETED BY**

Bradley Harris, DVM, DACVECC, DACVIM (cardiology)

**IMAGING PERFORMED BY**

Kathleen Byrnes

**HOSPITAL NAME**

Animal Clinic Madison Mayodan

**REFERRING VET**

Dr. McKinlay

**INVOICE**

71978

**DATE**

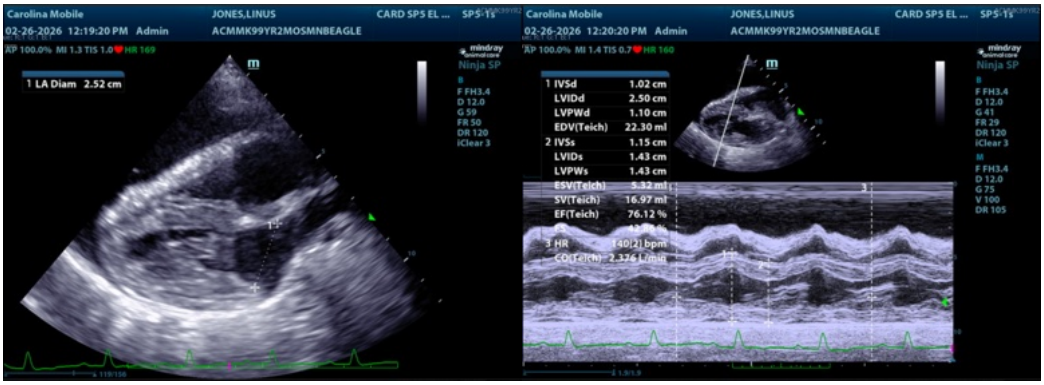
2/26/26

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; unfortunately surgery does not alter the natural course of disease, which may only afford a prognosis of a few months. Chemotherapy or radiation concurrent with surgery can be associated with a better prognosis, but this path is considered too aggressive by many owners who will elect to euthanize rather than pursue surgery/chemotherapy.

Anesthesia considerations:
Anesthesia should be avoided until any signs of CHF and pericardial effusion have resolved. If anesthesia is necessary after that time, 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.

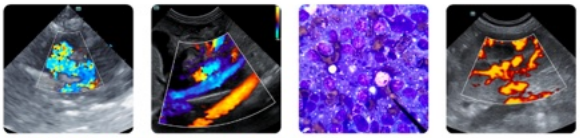
Diet:
No special considerations are necessary. Any high-quality food from Hills, Royal Canin, Science Diet, Eukanuba, Iams, or Purina is reasonable.

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.



Carolina Veterinary Mobile
FUELED BY SONOPATH VETERINARY ULTRASOUND

SonoPath www.carolinavetmobile.com
info@carolinavetmobile.com 800.808.5948



Clinical Sonography & Telecytology
Educational Teleconsultation Services™

**PATIENT**

Linus Jones

**SPECIES**

Canine

**BREED**

Beagle

**SEX**

Neutered male

**AGE**

9 years

**WEIGHT**

29.6 lbs

**INTERPRETED BY**

Bradley Harris, DVM, DACVECC, DACVIM (cardiology)

**IMAGING PERFORMED BY**

Kathleen Byrnes

**HOSPITAL NAME**

Animal Clinic Madison Mayodan

**REFERRING VET**

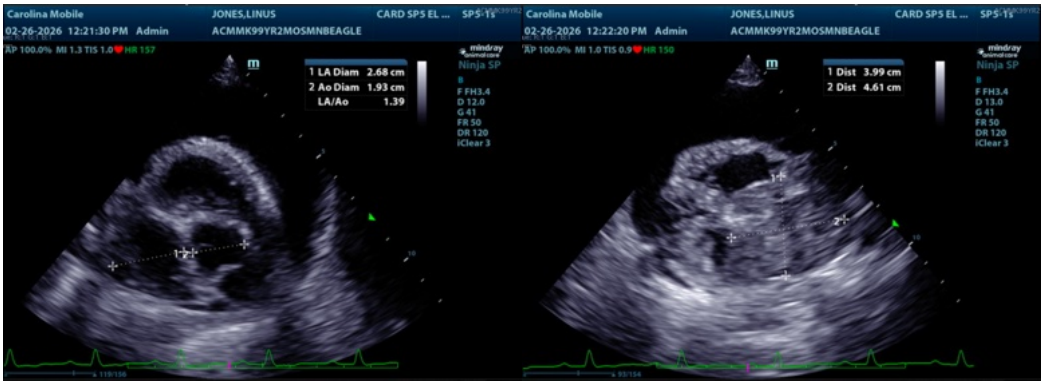
Dr. McKinlay

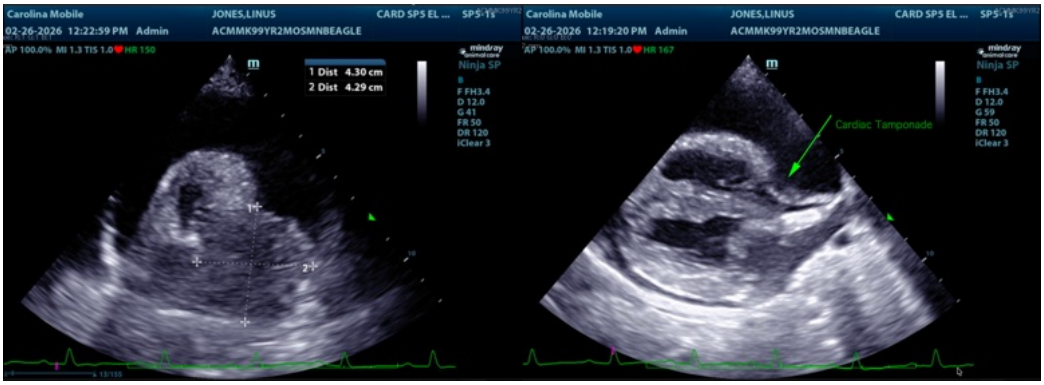
**INVOICE**

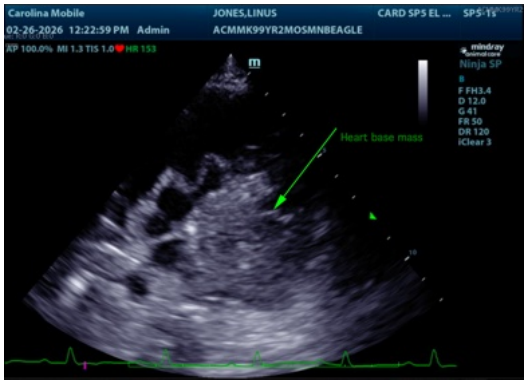
71978

**DATE**

2/26/26




**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