



## PATIENT

Bradley O'Brien

## SPECIES

Canine

## BREED

Cavalier King Charles  
Spaniel

## SEX

Neutered male

## AGE

8 years

## WEIGHT

36.4 lbs

## INTERPRETED BY

Alicia Angosto  
Guerrero, DMV,  
PgDip, MSc.

## IMAGING PERFORMED BY

Grace Jayne, CVT

## HOSPITAL NAME

Ark Animal Homecare

## REFERRING VET

Dr. Cronin

## INVOICE

73850

## DATE

3/26/26

## PRESENTING CLINICAL SIGNS

- Myxomatous mitral valve disease Murmur 2/6 diagnosed via cardiac US
- Vetmedin 5 mg BID, Enalapril 7.5 mg BID
- Proteinuria, Anemic, Mild hyponatremia (141) and hypochloremia (102), Normal ACTH stim
- History of skin infections
- Urine Protein: Creatinine Ratio 3.4 Specific Gravity 1.027 pH 8.5 RBC 5.62 Hematocrit 36.9 Hemoglobin 12.6 Reticulocyte Hemoglobin 23.2 Monocytes 0.106 Platelets 81 Platelets estimated to be 50,000 to 100,000/uL on the blood film Mild platelet clumping observed. Large platelets present. Sodium 141 Chloride 102 ALT 142 ALP 867

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### Urinary System

The urinary bladder is normally distended, with a thin and smooth wall. The urine is anechoic. The bladder neck and proximal urethra have a normal appearance. No calculi or evidence of inflammatory or neoplastic changes are identified.

The left kidney is normal in shape and size: 5.41×3.86 cm, with a cortical thickness of 0.70 cm in the sagittal plane. The cortex is isoechoic compared to the liver parenchyma. The corticomedullary ratio is normal and corticomedullary definition is preserved. There is no evidence of pyelectasia, nephroliths, or hydronephrosis.

The right kidney is normal in shape and size: 6.13×3.25 cm, with a cortical thickness of 0.65 cm in the sagittal plane. The cortex is isoechoic compared to the liver parenchyma. The corticomedullary ratio is normal and corticomedullary definition is preserved. There is no evidence of pyelectasia, nephroliths, or hydronephrosis. Color Doppler demonstrates a normal vascular pattern.

### Adrenal Glands

Both adrenal glands have normal shape and echogenicity. Dorsoventral diameters measured in the sagittal plane (maximum of two measurements per gland): the left adrenal gland measures 0.48 cm at the cranial pole and 0.49 cm at the caudal pole. Visualization of the right adrenal gland was suboptimal, which may mildly affect measurement accuracy; however, no masses or overt abnormalities are identified. It measures 0.52 cm at the cranial pole and 0.55 cm at the caudal pole.

### Spleen

Splenic thickness is 1.32 cm. The parenchyma demonstrates normal echogenicity and fine homogeneous echotexture without focal parenchymal abnormalities. The splenic capsule is smooth and regular

### Liver

The liver is subjectively normal in size, with sharp edges and a regular contour. The parenchyma is homogeneous and isoechoic relative to the falciform fat, with a normal echotexture. No hepatic lymphadenopathy is identified.



## PATIENT

Bradley O'Brien

## SPECIES

Canine

## BREED

Cavalier King Charles  
Spaniel

## SEX

Neutered male

## AGE

8 years

## WEIGHT

36.4 lbs

## INTERPRETED BY

Alicia Angosto  
Guerrero, DMV,  
PgDip, MSc.

## IMAGING PERFORMED BY

Grace Jayne, CVT

## HOSPITAL NAME

Ark Animal Homecare

## REFERRING VET

Dr. Cronin

## INVOICE

73850

## DATE

3/26/26

The gallbladder is moderately distended, with a thin wall. The lumen contains a moderate amount of biliary sludge, including a slightly more echogenic/mineral component that is mobile and tends to move toward the gallbladder neck and cystic duct. No choleliths or ultrasonographic evidence of mucocele are identified. No dilation of the cystic duct or common bile duct is observed.

### ***Gastrointestinal***

The stomach is semi-empty, with small amounts of ingesta. Wall thickness is 3.07 mm with preserved layering. The pylorus measures 4.32 mm. The duodenum measures 3.60 mm and the jejunum 3.37 mm, both with normal wall layering. No signs of inflammation, ileus, or foreign material are identified. The colon measures 0.83 mm, with a small amount of formed feces in the descending segment.

### ***Pancreas***

The evaluated pancreatic areas do not show evidence of overt inflammation or neoplastic disease.

### ***Free Abdomen***

No sonographic evidence of abdominal effusion, peritonitis, or lymphadenomegaly is identified. The iliac trifurcation appears normal.

## **PRIMARY FINDINGS**

- Moderate biliary sludge.

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

The only ultrasonographic abnormality is the presence of moderate biliary sludge with a mild partially more echogenic component. This finding is nonspecific and commonly incidental. There is no ultrasonographic evidence of biliary obstruction, gallbladder mucocele, or structural hepatic disease. The marked ALP elevation cannot be explained by the ultrasound findings alone and may reflect non-obstructive causes such as steroid-induced hepatopathy, vacuolar change, or reactive hepatopathy. It should be emphasized that diffuse hepatopathies (including vacuolar hepatopathy or early cholestatic disease) may be present despite a normal ultrasound appearance.

Both kidneys are within normal size and morphology, with preserved corticomedullary definition and normal cortical thickness which falls within expected reference ranges for a dog of this size. However, the significant proteinuria is not explained by the ultrasound findings. This is not unexpected, as glomerular disease typically does not produce detectable ultrasonographic changes.

### **Recommendations**

- Proteinuria workup  
Given UPC 3.4, further evaluation of glomerular disease is indicated (blood pressure measurement, repeat UPC, infectious disease testing depending on geographic risk, ± renal



**PATIENT**

Bradley O'Brien

**SPECIES**

Canine

**BREED**

Cavalier King Charles  
Spaniel

**SEX**

Neutered male

**AGE**

8 years

**WEIGHT**

36.4 lbs

**INTERPRETED BY**

Alicia Angosto  
Guerrero, DMV,  
PgDip, MSc.

**IMAGING  
PERFORMED BY**

Grace Jayne, CVT

**HOSPITAL NAME**

Ark Animal Homecare

**REFERRING VET**

Dr. Cronin

**INVOICE**

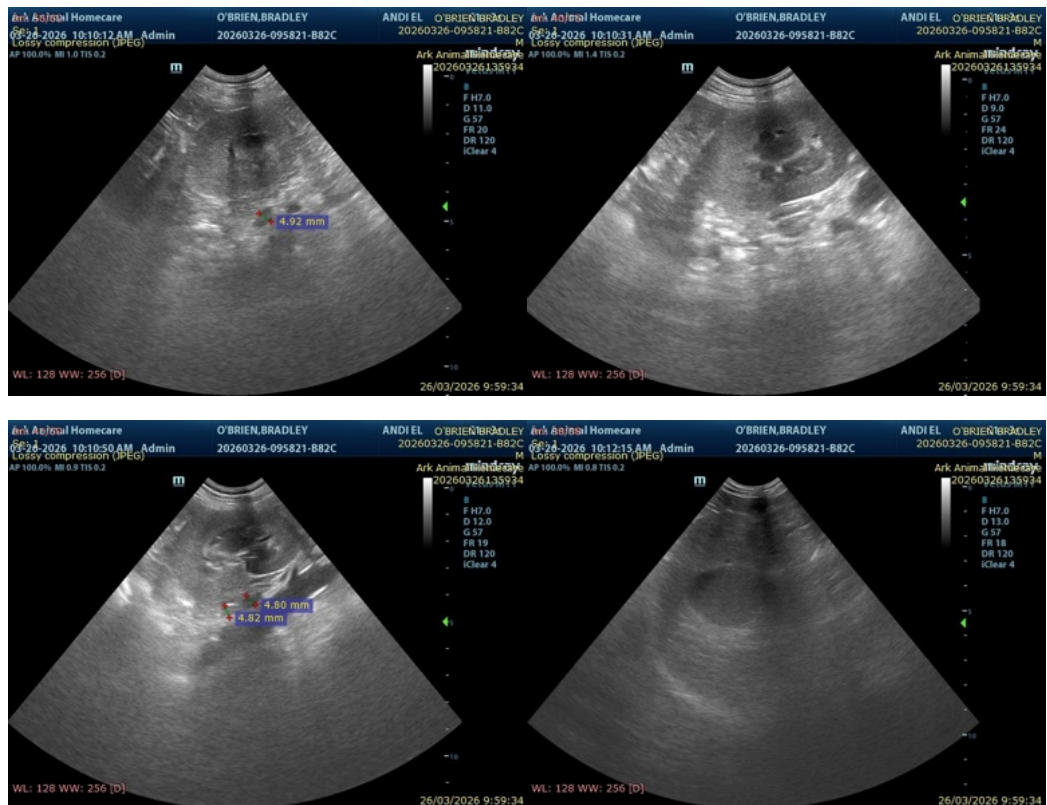
73850

**DATE**

3/26/26

- panel trends).
- Hepatobiliary monitoring:
  - Consider medical management (ursodeoxycholic acid) if clinically appropriate, especially with persistent ALP elevation.
  - Correlate with liver function tests.
  - Follow-up ultrasound may be considered to monitor sludge progression.
- Recheck CBC and platelet count.

Final diagnostic and therapeutic decisions should be made by the attending veterinarian, who can best integrate these findings with the patient's clinical status.





**PATIENT**

Bradley O'Brien

**SPECIES**

Canine

**BREED**

Cavalier King Charles  
Spaniel

**SEX**

Neutered male

**AGE**

8 years

**WEIGHT**

36.4 lbs

**INTERPRETED BY**

Alicia Angosto  
Guerrero, DMV,  
PgDip, MSc.

**IMAGING  
PERFORMED BY**

Grace Jayne, CVT

**HOSPITAL NAME**

Ark Animal Homecare

**REFERRING VET**

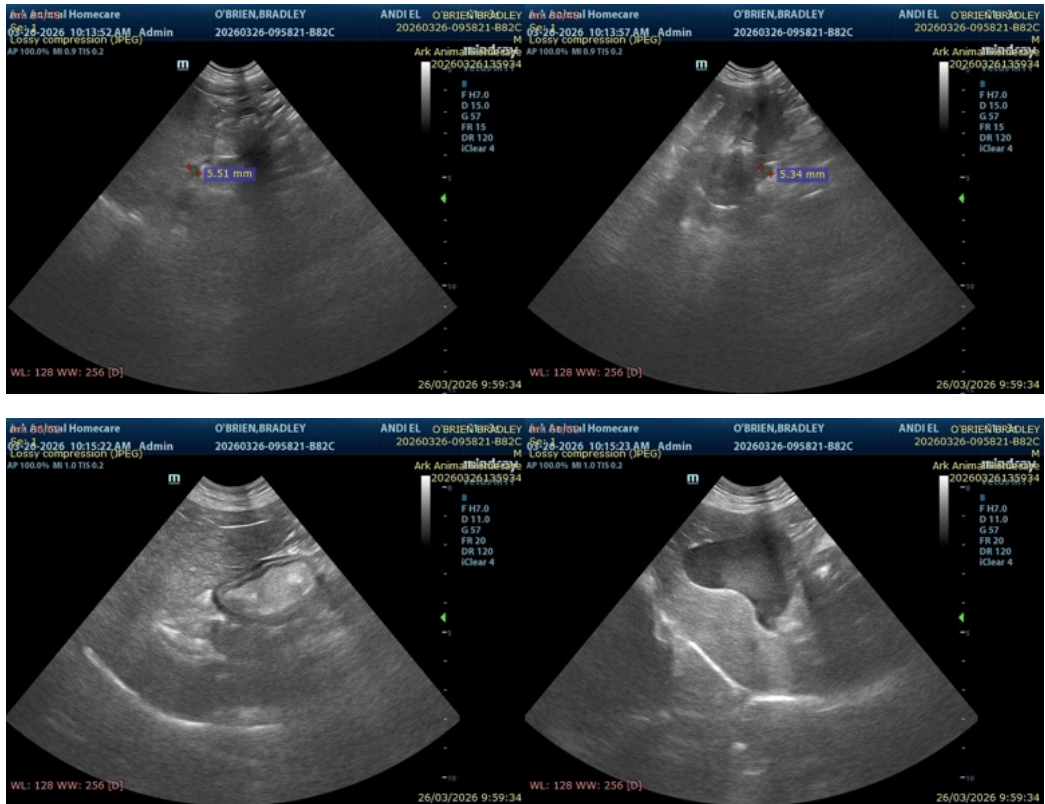
Dr. Cronin

**INVOICE**

73850

**DATE**

3/26/26



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.

Alicia Angosto Guerrero, DMV, PgDip, MSc.

[info@SonoPath.com](mailto:info@SonoPath.com)