

**PATIENT**

Bailey Crossley

SPECIES

Canine

BREED

Beagle

SEX

Spayed Female

AGE

12 ½ years

WEIGHT

32.6 Pounds

INTERPRETED BYLisa Carioto, DVM,
DVSc, Diplomate
ACVIM**IMAGING
PERFORMED BY**

Amy Mayhew LVT

HOSPITAL NAME

SVS Imaging Michigan

REFERRING VET

Family Pet Practice

INVOICE

30715

DATE

5/24/22

PRESENTING CLINICAL SIGNS

History: Current Medications: Denamarin and ursodiol continued long-term Patient History: Cholecystectomy performed 9/23/20 Presented for AUS for routine monitoring.

Abnormal PE/Chem/CBC/UA Results: Last exam performed 5/25/21: Per O much more active and puppy like after cholecystectomy 5. Moderate generalized tartar, recommend dental suspect routine, discussed need for extractions to be determined at time of procedure 8. Soft fluctuant SQ mass ventral abdomen- suspect lipoma, recommend monitoring 9/10. Moderately tense pendulous abdomen (anxious for exam) 12. Mild crepitus left stifle- Recommend glucosamine longterm **please see attached BW

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The urinary bladder is well distended with anechoic contents. The wall is smooth and regular. No abnormalities are noted with the trigone or proximal urethra, and there is no evidence of sediment, cystoliths, polyps or a mass.

Kidneys

The **left** kidney measures 5.84 cm. The capsule is smooth. The cortex is mildly hyperechoic, i.e. it is isoechoic to the spleen. Pinpoint hyperechoic foci, consistent with mineralizations, are noted within the cortex. The definition of the cortico-medullary junction is well preserved. Very mild mineralization of the diverticulae and pelvis are present, without evidence of nephroliths or pyelectasia. An anechoic structure, measuring 0.39 cm, is present at the antimesenteric border; it is consistent with a benign cyst. The surrounding mesentery is not hyperechoic.

The **right** kidney measures 5.95 cm. The capsule is smooth. The cortex is mildly hyperechoic, i.e. it is mildly hyperechoic to the liver. Pinpoint hyperechoic foci, consistent with mineralizations, are noted within the cortex. Mild loss of the normal definition of the cortico-medullary junction is noted. mild mineralization of the diverticulae and pelvis are present, without evidence of nephroliths or pyelectasia. An anechoic structure, measuring 0.32 cm, is present at the cranial pole; it is consistent with a benign cyst. The surrounding mesentery is very mildly hyperechoic, however this may be due to the presence of a small amount of anechoic fluid observed adjacent to the right kidney and duodenum.

Aortic bifurcation/trifurcation

No abnormalities observed.

Adrenal Glands

The **left** adrenal gland measures 0.63 cm at the cranial pole, 0.55 cm at the caudal pole. The cranial pole is slightly plump, however no signs of a mass or nodule is observed. No abnormalities are noted with the gland's overall architecture, echogenicity or echotexture. The phrenico-abdominal vein and surrounding vasculature and mesentery are unremarkable.

The **right** adrenal gland measures 0.55 cm at the cranial pole, 0.59 cm at the caudal pole. No abnormalities are noted with the gland's overall architecture, echogenicity or echotexture. The phrenico-abdominal vein and surrounding vasculature and mesentery are unremarkable.

**PATIENT**

Bailey Crossley

SPECIES

Canine

BREED

Beagle

SEX

Spayed Female

AGE

12 ½ years

WEIGHT

32.6 Pounds

Spleen

The spleen is within normal limits in size, architecture, echotexture, and echogenicity. The capsule is smooth. A well circumscribed, hypoechoic, subcapsular nodule, measuring 0.61 cm in diameter, is observed. It does not disrupt the integrity of the capsule. No abnormalities are observed with its vasculature, i.e. congestion and thrombi are not identified. Occasional perivascular cuffing, consistent with myelolipomas is observed; this is considered clinically insignificant. Free fluid is present dorsal to the spleen.

Liver

There are no obvious signs of hepatomegaly and its borders are smooth, but mildly rounded. The liver's echotexture is homogeneous other than the occasional hypoechoic nodule (see later). It appears to be within normal limits in echogenicity. It is hypoechoic to the cortex of the right kidney. The latter is mildly hyperechoic compared to normal. No abnormalities are observed with the hepatic vessels visualized.

In the left sagittal view of the liver, a hypoechoic slightly ill-defined nodule is observed it measures 1.69 cm in diameter x 2.31 cm in length. The nodule in the transverse view measures 2.16 cm in diameter x 2.40 cm in length. In 2020, a focal, hypoechoic nodule in the left liver (sagittal 1.29 cm x 1.73 cm) was noted. A slight increase in the size of the nodule has occurred since the last exam. Two small, well-defined hypoechoic nodules are visualized in the porta hepatis.

Gallbladder absent due to previous cholecystectomy.

INTERPRETED BYLisa Carioto, DVM,
DVSc, Diplomate
ACVIM**Gastrointestinal**

Gas is present within the lumen of the stomach. The gastric wall is within normal limits in thickness and the wall layers are well defined. Subjectively the muscularis is more prominent than usual. No obvious abnormalities are observed with its peristalsis.

The duodenum is within normal limits in wall thickness and the definition of the wall layers is preserved, however, mild stippling of the mucosa is observed. A small amount of gas is present in the lumen. A small amount of anechoic fluid is noted surrounding the duodenum.

IMAGING PERFORMED BY

Amy Mayhew LVT

The small intestines show mild mucosal fogging and stippling, however, their wall thickness and definition of the wall layers are within normal limits. Abnormally dilated loops of bowel are not observed. The mesentery is markedly hyperechoic throughout the abdomen.

HOSPITAL NAME

SVS Imaging Michigan

The colonic wall is not thickened and mural detail is considered normal. Form stools are present within the colon.

REFERRING VET

Family Pet Practice

Pancreas

No overt abnormalities are observed with the echogenicity or echotexture of the left limb or body. The right limb is very mildly hypoechoic. Occasional pinpoint hyperechoic foci are noted throughout the parenchyma. The latter may be consistent with fibrosis, which may occur secondary to age-related changes, secondary to previous episodes of pancreatitis, and mineralization. Very mild hyperechogenicity of the surrounding mesentery is present, i.e., signs of very mild (smoldering) active pancreatitis cannot be excluded.

INVOICE

30715

DATE

5/24/22

**PATIENT***Other*

Bailey Crossley

Lymph nodes

No abnormalities are observed

SPECIES

Canine

*Abdominal effusion***BREED**

Beagle

A very small amount of anechoic effusion is visualized in the left abdomen between the intestines and dorsal to the spleen. A small amount of anechoic fluid observed adjacent to the right kidney and duodenum.

The mesentery throughout the abdomen is markedly hyperechoic surrounding the GI tract.

SEX

Spayed Female

ULTRASONOGRAPHIC FINDINGS**AGE**

12 ½ years

- **Gastrointestinal tract:** The changes observed with the duodenal mucosa and the mucosa of the small intestines may not be clinically significant, however, “stippling” may be suggestive of inflammation in some patients, which can cause an elevated ALT enzyme activity. For example, inflammatory bowel disease. Findings should be correlated with clinical signs (e.g. history of gastroesophageal reflux disease (GERD), vomiting and/or diarrhea).

WEIGHT

32.6 Pounds

- Marked hyperechogenicity of the **mesentery** surrounding the GI tract throughout the abdomen and **ascites** may occur due to ongoing steatitis secondary to inflammatory bowel disease, or an immune mediated vasculitis, as well as a smoldering pancreatitis.

INTERPRETED BYLisa Carioto, DVM,
DVSc, Diplomate
ACVIM

- **Pancreas:** signs of very mild (smoldering) active pancreatitis cannot be excluded, in addition to fibrosis due to age related changes, or previous episodes of pancreatitis.

IMAGING PERFORMED BY

Amy Mayhew LVT

- **Liver:** The rounded liver borders may be due to chronic and ongoing disease, as well as previous disease. There are no signs of active hepatitis, however, an elevated ALT enzyme activity is suggestive of ongoing hepatocellular damage. Therefore, obtaining a history regarding exposure to parasites or infectious diseases is suggested, in addition to signs of GI disease, including GERD, as mentioned above, medications and natural supplements. The **hypoechoic nodules** are suggestive of nodular hyperplasia, which is a benign, age-related change often observed in senior patients. Other differential diagnoses include regeneration due to previous hepatic injury or disease. Target lesions are not observed, i.e. neoplasia is considered much less likely.

HOSPITAL NAME

SVS Imaging Michigan

- **Spleen:** The appearance of the splenic **nodule** is suggestive of a benign process, such as nodular or lymphoid hyperplasia and extramedullary hematopoiesis. Neoplasia, such as lymphoma, other round cell tumour, is considered unlikely.

REFERRING VET

Family Pet Practice

- **Left adrenal gland:** The cranial pole of the left adrenal gland is slightly “plump”. There is no evidence of a nodule or a mass. This finding may be clinically insignificant, however, other possibilities include adrenal hyperplasia due to stress, chronic illness or development of a benign adenoma.

INVOICE

30715

- **Kidneys:** Benign, bilateral cysts are present. Other changes are suggestive of age-related degeneration.

DATE

5/24/22

**PATIENT**

Bailey Crossley

SPECIES

Canine

BREED

Beagle

SEX

Spayed Female

AGE

12 ½ years

WEIGHT

32.6 Pounds

INTERPRETED BYLisa Carioto, DVM,
DVSc, Diplomate
ACVIM**IMAGING PERFORMED BY**

Amy Mayhew LVT

HOSPITAL NAME

SVS Imaging Michigan

REFERRING VET

Family Pet Practice

INVOICE

30715

DATE

5/24/22

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The following are suggested

- Obtaining a history regarding exposure to parasites or infectious diseases, in addition to signs of GI disease, including GERD, medications and natural supplements.
- Bailey's T4 is decreased. A TSH may be considered as hypothyroidism may cause an elevated ALT enzyme activity.
- The appearance of the hepatic nodules is much more suggestive of nodular hyperplasia/regeneration, however, a fine needle aspirate or tissue biopsy is required to obtain a definitive diagnosis. Another less invasive option is to re-evaluate Bailey sonographically in approximately 3 months, at which time the splenic nodule, ascites, etc., may also be re-evaluated.
- Splenic nodule: a re-evaluation of the abdominal ultrasound is suggested as neoplasia is considered highly unlikely.
- A baseline cortisol and possible dietary changes (if suggestive of immune-mediated issue) may be considered in the future depending on the cytology results of the peritoneal fluid and the Bailey's history regarding GI signs.
- Pentoxifylline may be required if a vasculitis is identified, particularly if neutrophilic.



IMAGING PERFORMED BY

SVS Mobile Imaging MI 734-637-7711
svsimagingmi@gmail.com



PATIENT

Bailey Crossley

SPECIES

Canine

BREED

Beagle

SEX

Spayed Female

AGE

12 1/2 years

WEIGHT

32.6 Pounds

INTERPRETED BY

Lisa Carioto, DVM,
DVSc, Diplomate
ACVIM

**IMAGING
PERFORMED BY**

Amy Mayhew LVT

HOSPITAL NAME

SVS Imaging Michigan

REFERRING VET

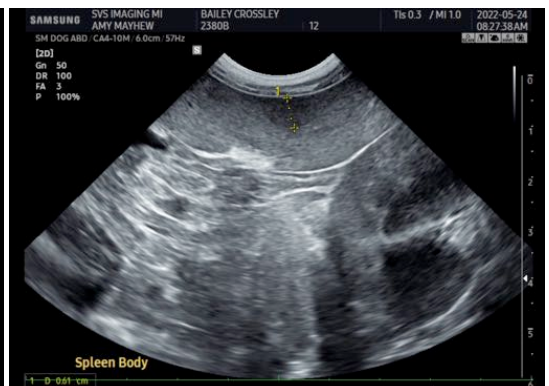
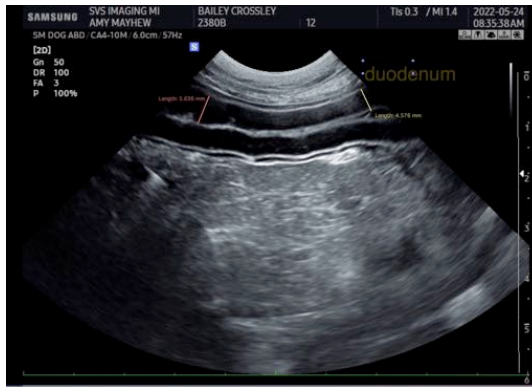
Family Pet Practice

INVOICE

30715

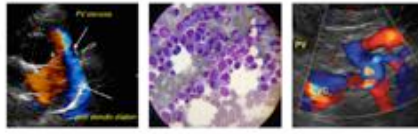
DATE

5/24/22



IMAGING PERFORMED BY

SVS Mobile Imaging MI 734-637-7711
svsimagingmi@gmail.com



PATIENT

Bailey Crossley

SPECIES

Canine

BREED

Beagle

SEX

Spayed Female

AGE

12 ½ years

WEIGHT

32.6 Pounds

INTERPRETED BY

Lisa Carioto, DVM,
DVSc, Diplomate
ACVIM

IMAGING PERFORMED BY

Amy Mayhew LVT

HOSPITAL NAME

SVS Imaging Michigan

REFERRING VET

Family Pet Practice

INVOICE

30715

DATE

5/24/22



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.

Lisa Carioto, DVM, DVSc, Diplomate ACVIM

Lisa.Carioto@sonopath.com