

**PATIENT**

Zach Dara

**PRESENTING CLINICAL SIGNS**

Vomiting off/on for 1 month. Decreased appetite and lethargy.

**SPECIES**

Canine

**BREED**

Havanese

**SEX**

Neutered Male

**AGE**

14 Years

**WEIGHT**

16.3 Pounds

**INTERPRETED BY**Beth Johnson, DVM  
DACVIM**IMAGING PERFORMED BY**

Amy Mayhew, LVT

**HOSPITAL NAME**

SVS Imaging MI

**REFERRING VET**Dr. Fairbairn -  
DePorre Vet**INVOICE**

45042

**DATE**

2/10/23

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****Urinary System**

Urinary bladder is only mildly distended (empty). Visible contents are anechoic. Urinary bladder wall is unable to be fully assessed for pathology without further distension. No visible masses or cystoliths are observed. The trigone and visible pelvic urethra are normal thickness with a smooth mucosal surface. If there are urinary signs and/or concern for urinary bladder pathology, reassessment after complete filling is recommended.

Prostate is normal in size, echotexture and echogenicity for a neutered male.

Kidneys are overall normal in size and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortices are uniform in texture with some mild increased cortical echogenicity and mild loss of corticomedullary distinction, expected in this age patient. There is no evidence of pyelectasia, mineral or infarcts observed. The right kidney measures 4.24 cm. The left kidney measures 4.33 cm.

**Adrenal Glands**

The right adrenal gland is normal in size (0.46 cm at the cranial pole and 0.42 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (0.52 cm at the cranial pole and 0.50 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

**Spleen**

The spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

**Liver**

Liver is subjectively enlarged with mildly irregular margins. Parenchyma is heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is moderately overdistended with organized, aggregated and centralized non-gravity dependent sludge. Striations of sludge separated by anechoic areas are noted extending from the lumen to the luminal wall. The wall is mildly thick, irregular and hyperechoic. There is no evidence of CBD dilation.

**Gastrointestinal**

The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The visible small intestines are normal in wall thickness and layering (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). Small intestinal motility appears adequate (1-3 contractions

## IMAGING PERFORMED BY

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



### PATIENT

Zach Dara

per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

### SPECIES

Canine

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

### BREED

Havanese

#### **Pancreas**

The pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

### SEX

Neutered Male

#### **Free Abdomen**

There is no evidence of free peritoneal effusion noted in these images.

There is no apparent lymphadenopathy noted in these images.

### AGE

14 Years

#### **PRIMARY FINDINGS**

- Gallbladder mucocele
- **Heterogenous Liver** – These changes are most consistent with benign processes such as nodular hyperplasia, steroid (vacuolar) hepatopathy, extramedullary hematopoiesis or possibly chronic inflammatory disease and less commonly infiltrative round cell or metastatic neoplasia.

### WEIGHT

16.3 Pounds

#### **ULTRASONOGRAPHIC FINDINGS**

- Age related kidneys

### INTERPRETED BY

Beth Johnson, DVM  
DACVIM

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

These images are consistent with a gallbladder mucocele, and recommendation is an exploratory laparotomy for planned cholecystectomy. Prior to surgery, three view thoracic radiographs are recommended for further assessment of cardio-pulmonary status as well as to further evaluate for any evidence of metastatic disease, if not recently evaluated.

### IMAGING PERFORMED BY

Amy Mayhew, LVT

Additionally, while possible, it is a little atypical to have a hepatocellular injury liver enzyme pattern versus a cholestatic pattern indicating a potential concurrent hepatopathy. Therefore, additionally, if the patient is stable, testing for Leptospirosis and/or potentially a fine needle aspirate of the liver if patient's coagulation status is appropriate could be considered prior to surgery. Alternatively, a liver biopsy would be recommended at the time of surgery regardless, so surgery could be pursued immediately.

### HOSPITAL NAME

SVS Imaging MI

### REFERRING VET

Dr. Fairbairn -  
DePorre Vet

### INVOICE

45042

### DATE

2/10/23

**IMAGING PERFORMED BY**

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



**PATIENT**

Zach Dara

**SPECIES**

Canine

**BREED**

Havanese

**SEX**

Neutered Male

**AGE**

14 Years

**WEIGHT**

16.3 Pounds

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**IMAGING PERFORMED BY**

Amy Mayhew, LVT

**HOSPITAL NAME**

SVS Imaging MI

**REFERRING VET**

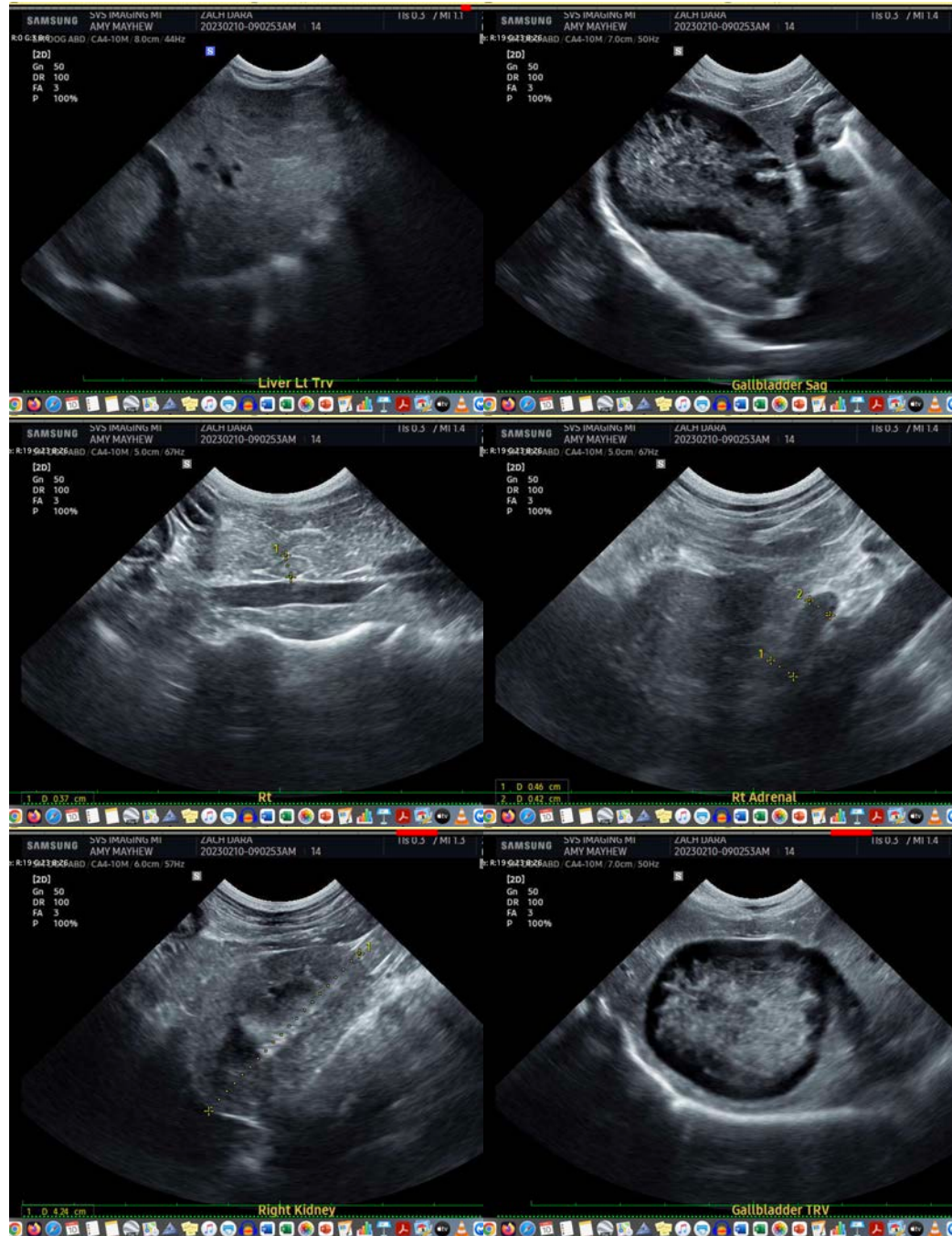
Dr. Fairbairn -  
DePorre Vet

**INVOICE**

45042

**DATE**

2/10/23



**IMAGING PERFORMED BY**

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



**PATIENT**

Zach Dara

**SPECIES**

Canine

**BREED**

Havanese

**SEX**

Neutered Male

**AGE**

14 Years

**WEIGHT**

16.3 Pounds

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**IMAGING PERFORMED BY**

Amy Mayhew, LVT

**HOSPITAL NAME**

SVS Imaging MI

**REFERRING VET**

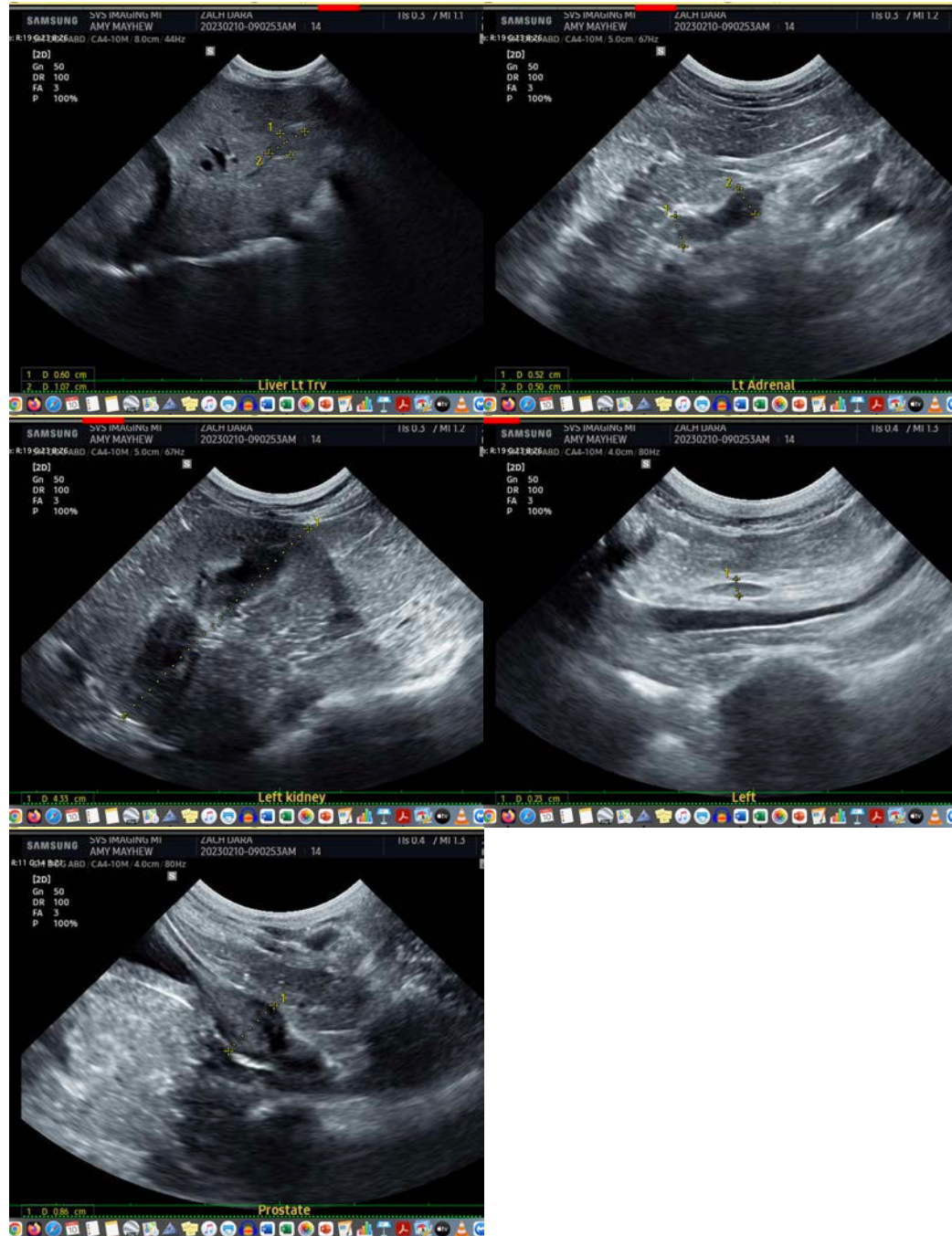
Dr. Fairbairn -  
DePorre Vet

**INVOICE**

45042

**DATE**

2/10/23



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.

**Beth Johnson, DVM, DACVIM**  
Beth.Johnson@sonopath.com