



## PATIENT

Miss Hiss Boomers  
Heven Animal Rescue  
and Sanctuary

## SPECIES

Feline

## BREED

DSH

## SEX

Spayed Female

## AGE

2 Years 3 Months

## WEIGHT

4.63 kg

## INTERPRETED BY

Greg Kuhlman, DVM,  
DACVIM (SAIM)

## IMAGING PERFORMED BY

Dr. Mariusz  
Chmielinski, DVM

## HOSPITAL NAME

Apex Veterinary  
Services LTD

## REFERRING VET

Save Emergency/ ER  
Doctor

## INVOICE

16468

## DATE

05/22/26

## PRESENTING CLINICAL SIGNS

Feline rescue patient presenting for 3 days of lethargy, severe inappetence, nausea, abdominal pain, and marked icterus

Abnormal PE/Chem/CBC/UA Results: T 37.9°C, HR 184 bpm, RR 32/min, BP 130/109 (MAP 112). Patient lethargic and icteric with yellow discoloration of pinnae and mucous membranes. Ptyalism and nausea noted. Mild periodontal disease present. Tachypnea without abnormal lung sounds. Abdomen painful on palpation with suspected hepatomegaly. No heart murmur or peripheral lymphadenopathy identified. Hydration and perfusion adequate at presentation. BCS 6/9 CBC unremarkable. Chemistry showed marked hyperbilirubinemia (Tbili 104 umol/L), elevated ALP, ALT, AST, and GGT consistent with significant hepatobiliary disease. Mild hypoproteinemia/hyperglobulinemia also present. Electrolyte abnormalities included hypokalemia (initial), hypochloremia, hypocalcemia, and mild hyponatremia. PT markedly prolonged (>100 sec).

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### Urinary System

The bladder is moderately distended with anechoic urine. No uroliths are seen. The bladder wall is normal in appearance and thickness. No masses are seen.

The left kidney presents normal size with irregular shape and architecture. Mild loss of corticomedullary distinction. The left kidney measured 3.7 cm in length and has moderate renal pelvic dilation of 6.7 mm width.

The right kidney presents normal size with irregular shape and architecture. Mild loss of corticomedullary distinction. No pyelectasia, ureteral dilation or nephrolithiasis. The right kidney measured 4.0 cm in length.

### Adrenal Glands

The left adrenal gland presents normal shape and homogenous parenchyma. The phrenic vasculature is unremarkable. The left adrenal gland measures 3.7 mm width.

The right adrenal gland presents normal shape and homogenous parenchyma. The phrenic vasculature is unremarkable. The right adrenal gland measures 3.4 mm width.

### Spleen

The spleen is normal in size, shape, margination and echogenicity. No masses are seen.

### Liver

Liver is subjectively enlarged (swollen contour) without disruption of architecture. It has a normal homogenous echotexture. Parenchyma is diffusely hyperechoic characterized by less prominent than normal portal vein walls and increased echogenicity relative to the spleen and falciform fat. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder contains minimal bile at this time and appears to have been recently contracted. There is a scant pocket of free fluid surrounding the gallbladder that is most likely too small to aspirate to obtain



## PATIENT

Miss Hiss Boomers  
Heven Animal Rescue  
and Sanctuary

## SPECIES

Feline

## BREED

DSH

## SEX

Spayed Female

## AGE

2 Years 3 Months

## WEIGHT

4.63 kg

## INTERPRETED BY

Greg Kuhlman, DVM,  
DACVIM (SAIM)

## IMAGING PERFORMED BY

Dr. Mariusz  
Chmielinski, DVM

## HOSPITAL NAME

Apex Veterinary  
Services LTD

## REFERRING VET

Save Emergency/ ER  
Doctor

## INVOICE

16468

## DATE

05/22/26

a sample. Gallbladder rupture isn't highly suspected at this time. There is suspected to be more fluid surrounding the gallbladder if that was the case.

## Gastrointestinal

The stomach has normal wall layering and thickness. Colon contains normal contents with normal wall thickness.

The duodenum was thickened with some sections measuring up to 3.7 mm width. Marked loss of normal layering appearance, moderately to markedly thickened muscularis layer. The duodenum appears to have a very mildly corrugated appearance, most likely consistent with peristalsis and not consistent with a linear foreign body.

## Pancreas

The visible pancreas is mildly, diffusely hypoechoic without significant surrounding hyperechoic fat. Patient appears to have mild reactive pancreatic inflammation.

## Free Abdomen

There are numerous mildly to moderately enlarged mesenteric lymph nodes present throughout the abdomen with a representative node measuring 9.4 mm x 3.5 mm in size. These nodes may be reactive of the patient's underlying apparent gastrointestinal disease or may be enlarged due to a neoplastic cause such as lymphoma or mast cell disease or possibly metastatic neoplasia.

## ULTRASONOGRAPHIC FINDINGS

- Mesenteric lymphadenopathy.
- Intestinal thickening.
- Chronic kidney disease.
- Hyperechoic hepatomegaly possibly consistent with possible vacuolar hepatopathy most likely due to lipid hepatopathy from hepatic lipidosis, unlikely to be infiltrative disease such as lymphoma.
- Hypoechoic pancreas.

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

If possible, recommend FNA of lymph node with submission for cytology.

Given the appearance of the kidneys, consider a possible chronic kidney disease. Recommend full staging, monitoring and managing per IRIS guidelines. Given the renal pelvic dilation of the left kidney, consider a possible pyelonephritis. Recommend urine culture. Possible obstructive disease within the left ureter causing the pyelectasia, however an obstruction was not seen on this exam.

Consider FNA of liver with submission for cytology to rule out infiltrative disease and determine if hepatic lipidosis present. If it is, patient may need placement of an esophageal feeding tube to provide enteral nutrition as further diagnostics are performed, and the treatment plan is implemented.

Recommend rechecking gallbladder in 12 to 24 hours via ultrasound to confirm that it is filling normally with bile.

Consider submitting an fPLI to confirm suspect pancreatic inflammation.



**PATIENT**

Miss Hiss Boomers  
Heven Animal Rescue  
and Sanctuary

**SPECIES**

Feline

**BREED**

DSH

**SEX**

Spayed Female

**AGE**

2 Years 3 Months

**WEIGHT**

4.63 kg

**INTERPRETED BY**

Greg Kuhlman, DVM,  
DACVIM (SAIM)

**IMAGING PERFORMED BY**

Dr. Mariusz  
Chmielinski, DVM

**HOSPITAL NAME**

Apex Veterinary  
Services LTD

**REFERRING VET**

Save Emergency/ ER  
Doctor

**INVOICE**

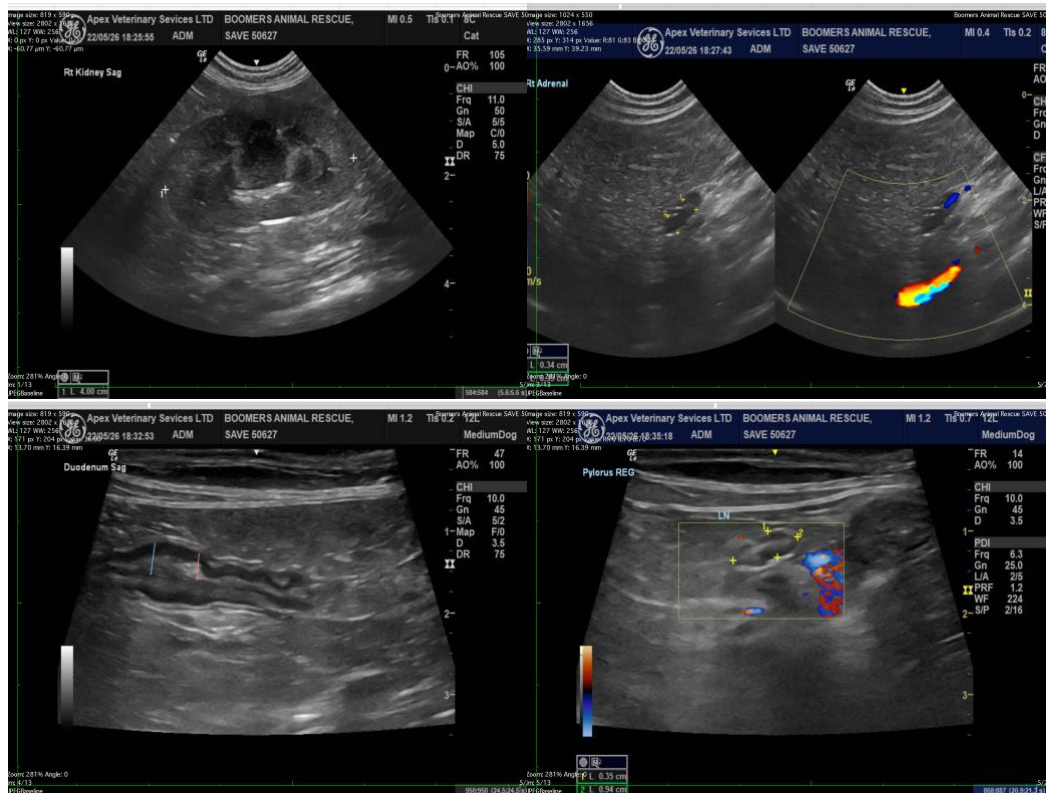
16468

**DATE**

05/22/26

The appearance of the patient's duodenum is concerning for a possible neoplastic process such as lymphoma, an infiltrative neoplastic process such as lymphoma or mast cell disease. Other differentials would include possibly a foreign body had lodged in this location of the duodenum and caused inflammation resulting in the appearance of the duodenum and then the foreign body has since moved on. No evidence of a foreign body is seen elsewhere within this exam, so it is not certain that this is highly likely. At this time, there are two options:

One, a conservative option, treat patient supportively, rechecking GI, ultrasound, focusing on duodenum in 24 to 48 hours to determine if improvement is seen or consider GI biopsies at this time either surgically or endoscopically. Surgical biopsies will allow focus on the gallbladder. If there is still concern it may have ruptured and also would allow the surgeon to obtain liver biopsies at the same procedure. However, endoscopic biopsies focusing solely on stomach and duodenum would also be of value in this case. Most likely whatever disease process is affecting the patient globally is primarily starting within the duodenum.





### PATIENT

Miss Hiss Boomers  
Heven Animal Rescue  
and Sanctuary

### SPECIES

Feline

### BREED

DSH

### SEX

Spayed Female

### AGE

2 Years 3 Months

### WEIGHT

4.63 kg

### INTERPRETED BY

Greg Kuhlman, DVM,  
DACVIM (SAIM)

### IMAGING PERFORMED BY

Dr. Mariusz  
Chmielinski, DVM

### HOSPITAL NAME

Apex Veterinary  
Services LTD

### REFERRING VET

Save Emergency/ ER  
Doctor

### INVOICE

16468

### DATE

05/22/26



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.

**Greg Kuhlman, DVM, DACVIM (SAIM)**  
Veterinary Internal Medicine Specialist  
[info@SonoPath.com](mailto:info@SonoPath.com)