



**PATIENT**

Thomas Bovell

**SPECIES**

Feline

**BREED**

DSH

**SEX**

Neutered Male

**AGE**

9 Years

**WEIGHT**

5.1 kg

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**IMAGING PERFORMED BY**

Evan Bell

**HOSPITAL NAME**

Cedarview AH

**REFERRING VET**

Dr. Christie Limbrick

**INVOICE**

42481

**DATE**

10/28/22

**PRESENTING CLINICAL SIGNS**

he presented initially in August for intermittent anorexia and significant lethargic - bloodwork at the time showed the following: L Sodium 144 147 - 157 mmol/L L Chloride 110 114 - 126 mmol/L Urine Protein 2+ (1 g/L) - UPCr added on and was 0.2 Red Blood Cells 10-15 /HPF Lipemia Index c +++++ -his clinical signs seemed to stabilize at the time and further work up was discontinued. -In the last couple of months the symptoms have returned maybe 8 times where he skips a meal, seems very lethargic, sleeps the entire day, and then returns to normal once more. Aside from severe dental disease (only 6 teeth remaining) he seems quite normal on PE. Repeat wellness panel, GI panel, and triglycerides pending.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

Urinary bladder is adequately distended. It has a normal uniform wall thickness. Contents include primarily anechoic fluid with occasional echogenic non-shadowing debris, most consistent with incidental suspended lipid in a cat, possibly combined with exfoliated cells, mucous and/or small blood clots. Both sterile inflammation as well as urinary tract infection can also present with echogenic debris. No masses or cystoliths are observed. The trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

Kidneys are normal in size with increased cortical echogenicity. Normal smooth peripheral margination and shape are maintained. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed. Infiltrative disease (infectious, neoplastic, etc.) or nephritis cannot be ruled out but is considered less likely. The left kidney measures 4.7 cm. The right kidney measures 4.2 cm.

**Adrenal Glands**

The area of the right adrenal gland is examined without evident pathology.

The left adrenal gland is normal in size (0.38 cm), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

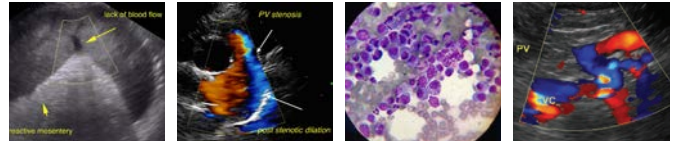
**Spleen**

Spleen is subjectively large in size with a mildly swollen but smooth capsule. Parenchyma is normal and homogenous in echogenicity and echotexture. No focal nodules or masses are observed. Splenic vasculature appears normal.

**Liver**

The liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is moderately distended with anechoic bile as well as suspended and gravity dependent echogenic debris. The wall is smooth without visible thickening. The cystic and common bile duct appear mildly tortuous, but not pathologically dilated, and no dilation is noted at the level of the duodenal papilla. This can be a normal anatomic variant in a cat and should be interpreted in combination with clinical signs and/or laboratory changes to suggest cholangitis, etc. There is no evidence of effusion or inflammation.



**PATIENT**

Thomas Bovell

**SPECIES**

Feline

**BREED**

DSH

**SEX**

Neutered Male

**AGE**

9 Years

**WEIGHT**

5.1 kg

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**IMAGING PERFORMED BY**

Evan Bell

**HOSPITAL NAME**

Cedarview AH

**REFERRING VET**

Dr. Christie Limbrick

**INVOICE**

42481

**DATE**

10/28/22

**Gastrointestinal**

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is mildly distended with echogenic non-shadowing luminal contents and gas consistent with normal ingesta. There is 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 per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

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

**Pancreas**

Pancreas is prominent (enlarged) in size, hypoechoic to surrounding tissue and has a mildly irregular undulating contour. Parenchyma is coarse with mixed echogenic remodeling noted. Pancreatic duct dilation is noted.

**Free Abdomen**

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

There is no apparent lymphadenopathy noted in these images.

**PRIMARY FINDINGS**

- Chronic active pancreatitis
- **Hypersplenism** – can be associated with congestion caused by sedation (if sedated) but can also be associated with diffuse infiltrative disease. Both benign conditions such as extramedullary hematopoiesis, lymphoid hyperplasia, amyloidosis as well as infiltrative neoplastic diseases such as round cell neoplasia should be considered.

**SECONDARY FINDINGS**

- Urinary bladder debris
- **Gallbladder debris** - Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness, however, it can also be associated with hepatobiliary disease in cats and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Recommendations for this patient include an overall metabolic health screen including CBC/Chem panel, electrolytes, and urinalysis, as is reportedly already pending, as well as a gastrointestinal malabsorption panel, as is reportedly already pending.

The biliary debris and tortuous common bile duct, which again is not pathologically dilated, in a cat are likely incidental normal anatomic variants, however should be interpreted in combination with laboratory changes such as liver enzyme increases or total bilirubin, etc. Without that, unless further diagnostic information is gained from the pending gastrointestinal malabsorption panel, next step could be a fine needle aspirate of the spleen if patient's coagulation status is appropriate.



**PATIENT**

Thomas Bovell

**SPECIES**

Feline

**BREED**

DSH

**SEX**

Neutered Male

**AGE**

9 Years

**WEIGHT**

5.1 kg

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**IMAGING PERFORMED BY**

Evan Bell

**HOSPITAL NAME**

Cedarview AH

**REFERRING VET**

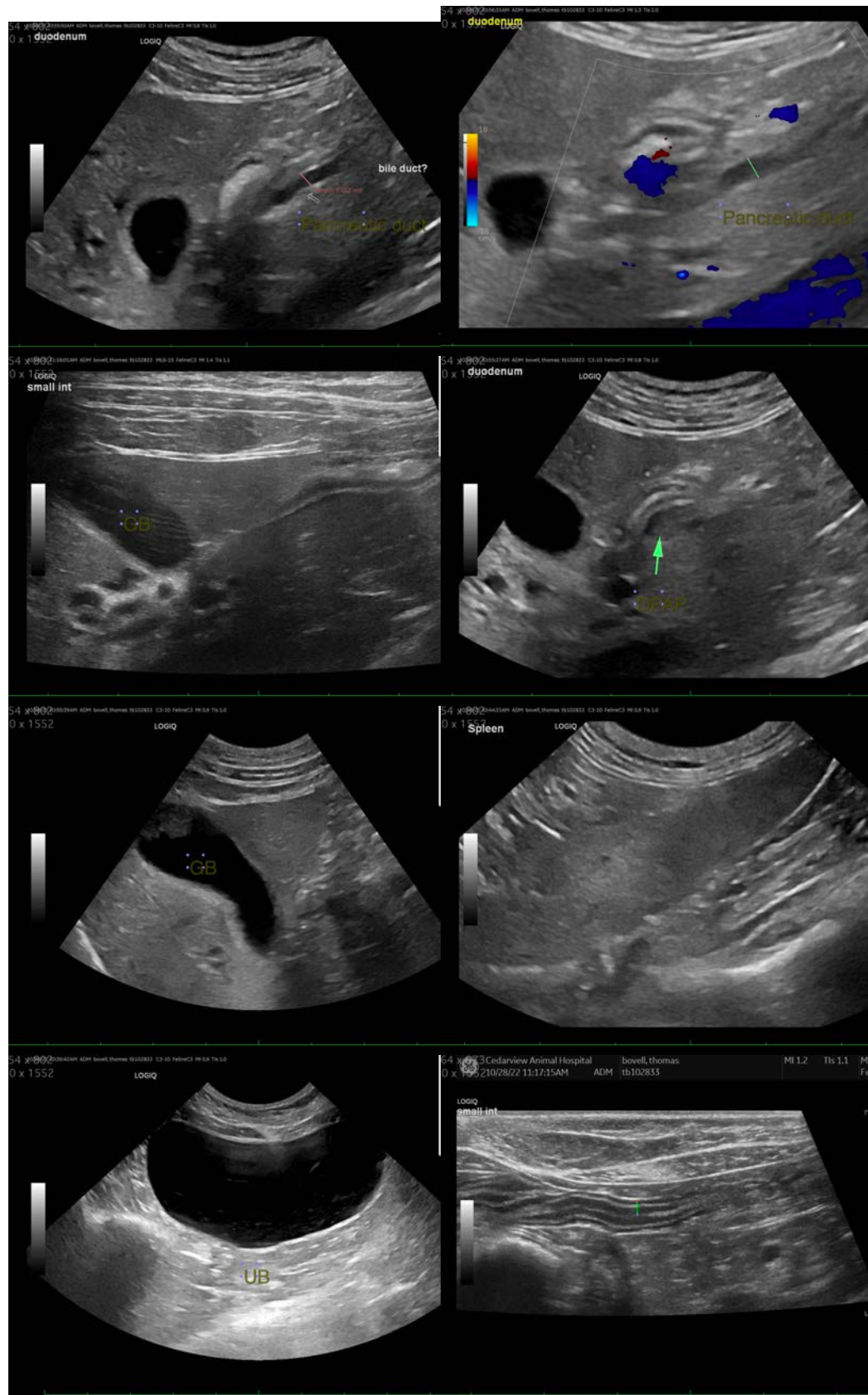
Dr. Christie Limbrick

**INVOICE**

42481

**DATE**

10/28/22





**PATIENT**

Thomas Bovell

**SPECIES**

Feline

**BREED**

DSH

**SEX**

Neutered Male

**AGE**

9 Years

**WEIGHT**

5.1 kg

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**IMAGING PERFORMED BY**

Evan Bell

**HOSPITAL NAME**

Cedarview AH

**REFERRING VET**

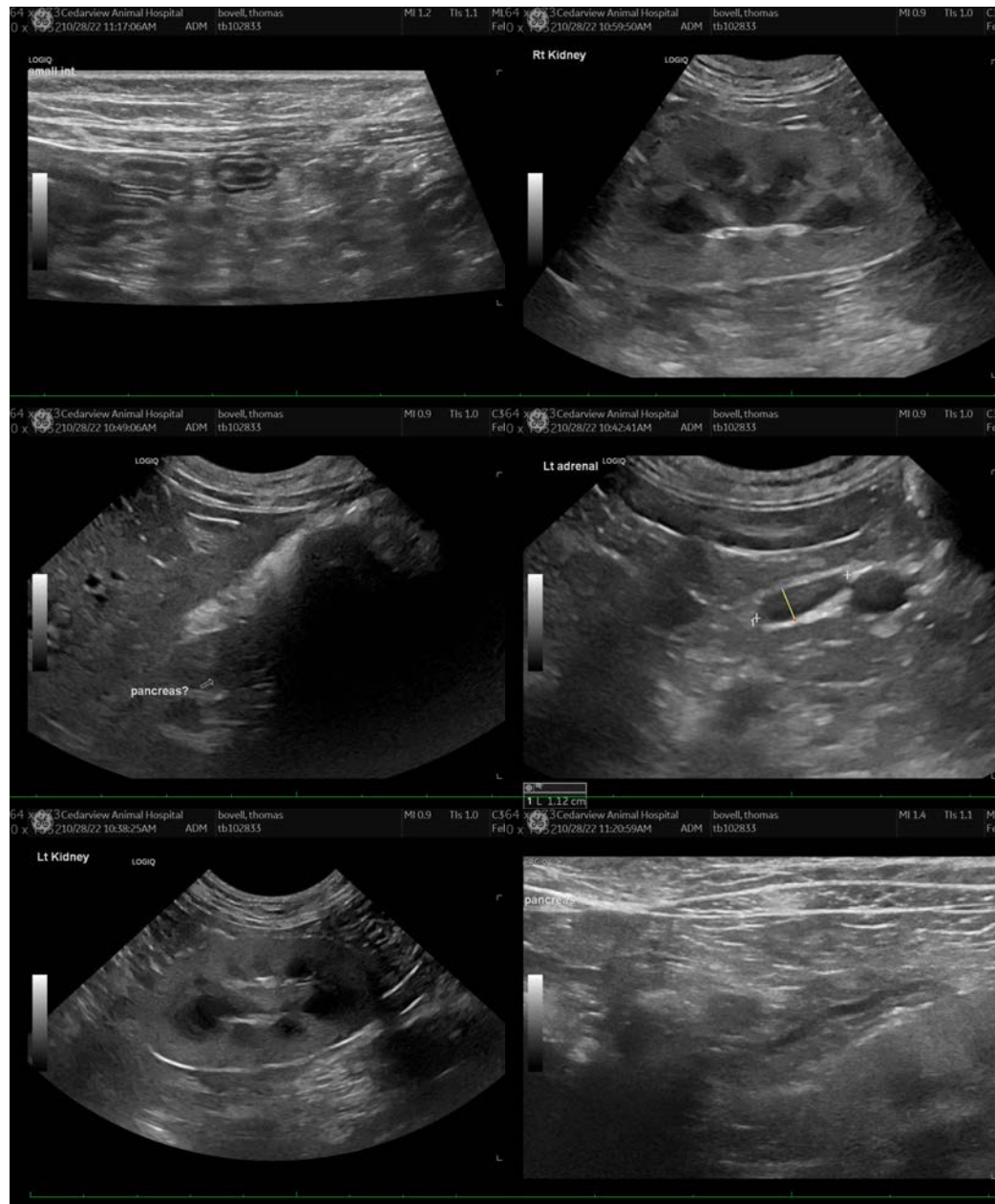
Dr. Christie Limbrick

**INVOICE**

42481

**DATE**

10/28/22



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.

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