

**DATE PRESENTING CLINICAL SIGNS**

12/28/21

History: David Copperfield is an FIV positive cat who presented for recurrence and worsening of a large sore on his head and weight loss over the past month or so. He has been on many medications to help resolves sores like the one he has on his face now, including prednisolone, gabapentin, Chlorpheniramine and Apoquel. The owner has tapered him off the Prednisolone over the past few weeks, but the owner thinks the weight loss started prior to tapering off of the prednisolone. His bloodwork showed an elevated blood glucose but the fructosamine is in the normal range. His BNP is mildly elevated and he does have an echo scheduled on 1/7/2022.

**PATIENT**

David Copperfield

**SPECIES**

Feline

**BREED**

DSH

**SEX**

Neutered Male

**AGE**

1/1/15

**WEIGHT**

9.5 Pounds

**INTERPRETED BY**

Kathleen Sennello DVM,  
MS, Diplomate ACVIM  
(Small Animal Internal  
Medicine)

**IMAGING PERFORMED BY**

Stephanie Pearce  
RDMS, RVT

**HOSPITAL NAME**

Cat Sense Feline  
Hospital

**REFERRING VET**

Dr. Sinclair

**INVOICE**

33783

Current Medications: Prednisolone 2.5mg bid Up until 5 weeks ago then he was tapered off, 2mg chlorpheniramine BID, 100mg gabapentin BID, 4mg Apoquel BID.  
Lab Results: BG=393 mg/dL (72-175), monos=819 (40-530), BNP=233 (0-100).  
Radiographs: Attached separately.  
Date of Previous IntraPet Ultrasound: No previous IntraPet scans.  
Sedation:  
Stat Report:

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

The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

The left kidney has a normal shape and size (4.94 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (5.25 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**Adrenal Glands**

The left adrenal gland is normal in size measuring 0.43 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

The right adrenal gland is normal in size measuring 0.33 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

**Spleen**

The spleen is subjectively normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

**Liver**

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is homogenous echotexture. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

The gall bladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. There is a mild amount of non-organized echogenic debris. The cystic and common bile ducts are normal/not visible.

### ***Gastrointestinal***

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.36cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a uniform diameter, many areas with moderate fluid distention. Wall thickness is normal to slightly increased. Bowel loops follow a typical curvilinear path with distinct wall layering, but some areas display a prominent muscularis layer which does not display the typical 1:3 muscularis:mucosa layer ratio. Jejunum wall measured 0.28 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Many sections of colon are visualized with a large volume of shadowing fecal material. There is no observed focal or generalized colon wall thickening or loss of layering.

### ***Pancreas***

The pancreas is large and hypoechoic to surrounding mesentery. There are numerous hypoechoic cystic lesions visible within the pancreatic tissue, the largest measuring 1.2 cm, and additional cystic structures visualized measuring 0.55 cm x 0.65 cm. There is evidence of regional mesenteric inflammation. Consistent with moderate pancreatitis.

### ***Free Abdomen***

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

## **ULTRASONOGRAPHIC FINDINGS**

- Irregular, hypoechoic pancreas with numerous cystic appearing lesions and surrounding hyperechoic mesentery – The pancreatic changes are most consistent with moderate pancreatitis/pancreatic inflammation. Recommend fPLI testing and continued monitoring for improvement or possible development of a pancreatic abscess. Consider fine needle aspirate if not improving. The cystic appearing parenchymal lesions are most consistent with pancreatic cysts, but abscesses and hypoechoic nodules are also possible differentials.
- Mildly prominent muscularis layer of the small intestine – The small intestinal wall changes are most consistent with an inflammatory process (i.e., inflammatory bowel disease) with a low possibility of emerging lymphoma.

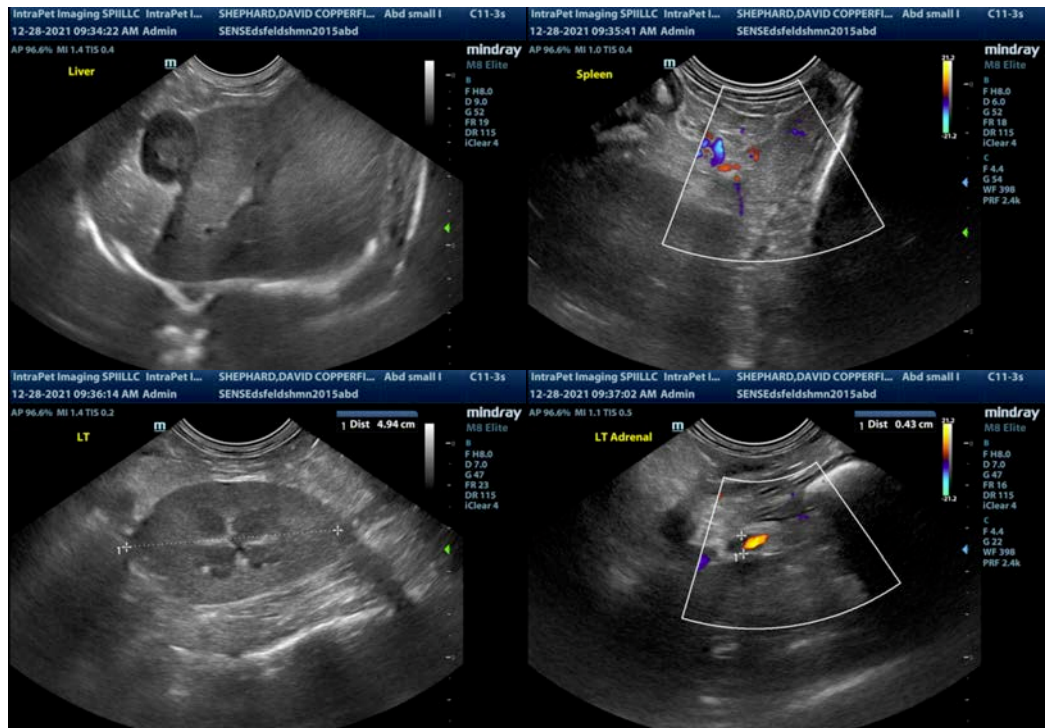
## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

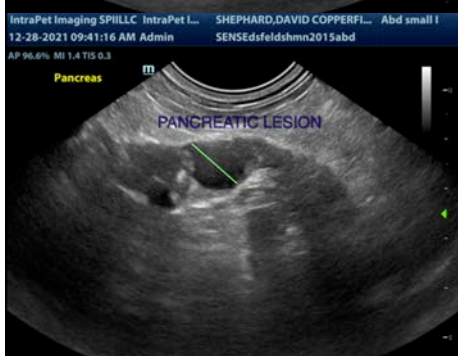
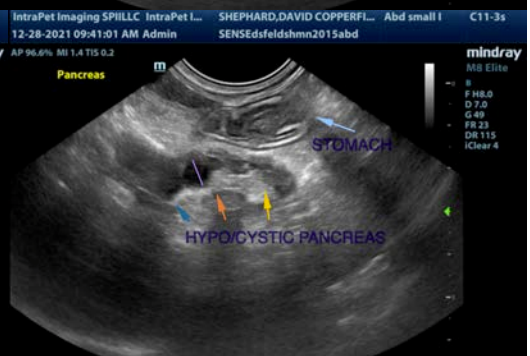
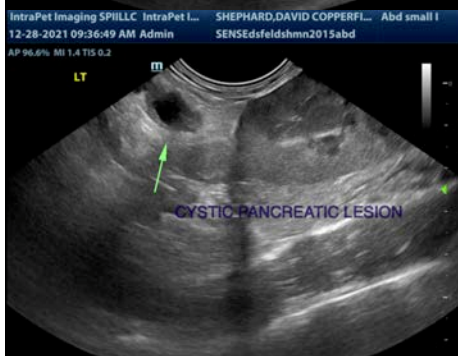
The pancreas is very prominent on today's scan, and it appears to have hypoechoic lesions most consistent with pancreatic cysts, but unfortunately, abscesses or hypoechoic nodules cannot be completely excluded as a possibility.

- Recommend a GI panel to Texas A&M for a qualitative fPLI, TLI, cobalamin and folate level.
- You could consider a fine needle aspirate/drainage of the pancreatic cysts if they can be reached via ultrasound.
- Recommend continued monitoring of the cysts with ultrasound (recheck in 1-2 weeks depending on patient condition) and recommended treatment for pancreatitis with antibiotics, supportive care, low-fat diet, etc.
- Recommend continued monitoring for the possible development of diabetes and recommend tapering off the Prednisolone as quickly as possible.
- Recommend 3-view thoracic radiographs to look for concurrent intrathoracic disease

Occasionally, pets with pancreatic disease (particularly pancreatic neoplasia) can have skin lesions. I'm not sure if this fits with the clinical picture, but consultation with a veterinary dermatologist would be an option.

Additionally, in some areas the bowel appeared somewhat prominent with a prominent muscularis layer, and there was fluid distention. This could be consistent with a previous meal, general ileus, or a distal small bowel obstruction, which was not evident, but the colon did seem somewhat distended. Therefore, constipation is possible. Correlate with abdominal radiographs.





**The information and recommendations provided are based on the images presented by the referring veterinarian. 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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)  
kathleen.sennello@sonopath.com