



**DATE PRESENTING CLINICAL SIGNS**

4/13/23 Inappetence, lethargy, ADR of 1-2 weeks duration. Has hx of potential IBD O was previously treating w/ Prednisolone off and on tapers for the past 1-2 years by previous hospital. PE: large dermal mass left lateral flank (previous aspiration inflammatory/benign cyst lesion), mild dehydration, abd palpates WNL, Heart/lungs WNL, otherwise NSF.

**PATIENT**

Punkin Mouser

**SPECIES**

Feline

**BREED**

DSH

**SEX**

Spayed Female

**AGE**

1/23/07

**WEIGHT**

12.8 Pounds

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**HOSPITAL NAME**

Everhart Vet Hospital

**REFERRING VET**

Dr. Baumler

**INVOICE**

46669

Current Medications: Clavamox 62.5mg BID PO started 4/12/23, Prednisolone 5mg SID PO -- starting taper off of as of 4/12/23., Buprenex transmucosal PRN, SQF 100ml 1-2x/week administered by O  
Lab Results: See attached.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Stephanie Warga RDCS, RVT.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The urinary bladder is moderately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

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 left kidney measures 3.71 cm. The right kidney measures 3.68 cm.

**Adrenal Glands**

The right adrenal gland is normal in size (0.37 cm), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (0.40 cm), 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 (swollen contour). Mild parenchymal remodeling with diffusely mildly coarse architecture and increased portal markings is present. No focal nodules or masses are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

The gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct 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 intestine demonstrates areas of thick muscularis layer relative to mucosa (disruption of the normal 1:3 muscularis:mucosa ratio). Small intestinal submucosa is slightly irregular, thick and hyperechoic, without evident loss of layering appreciated. The lumen is empty with no evidence of obstruction or foreign material.

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.

An overall subjectively hyperechoic enhanced mesentery is noted throughout the abdomen, most appreciated in the cranial abdomen between liver lobes and surrounding the stomach and pancreas.

## **PRIMARY FINDINGS**

- **Hypoechoic hepatomegaly** – This appearance is consistent with an acute hepatopathy or acute cholangiohepatitis. Infiltrative neoplasia (round cell neoplasia) should also be considered.
- **Inflammatory bowel disease (IBD) pattern** – Thick muscularis has been reported with infiltrative bowel disease including both benign inflammatory disease as well as infiltrative neoplasia such as lymphoma. No aggressive lymphadenopathy, loss of layering, etc. is noted to make lymphoma more probable, but lymphoma cannot be definitively ruled out without tissue sampling.
- Chronic active pancreatitis
- Enhanced hyperechoic mesentery, primarily in the cranial abdomen – Suggests an inflammatory response, possibly secondary to an infiltrative hepatopathy or potentially acute on chronic smoldering pancreatitis versus diffuse gastroenteritis versus other.

## **SECONDARY FINDINGS**

- Age related kidney changes

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

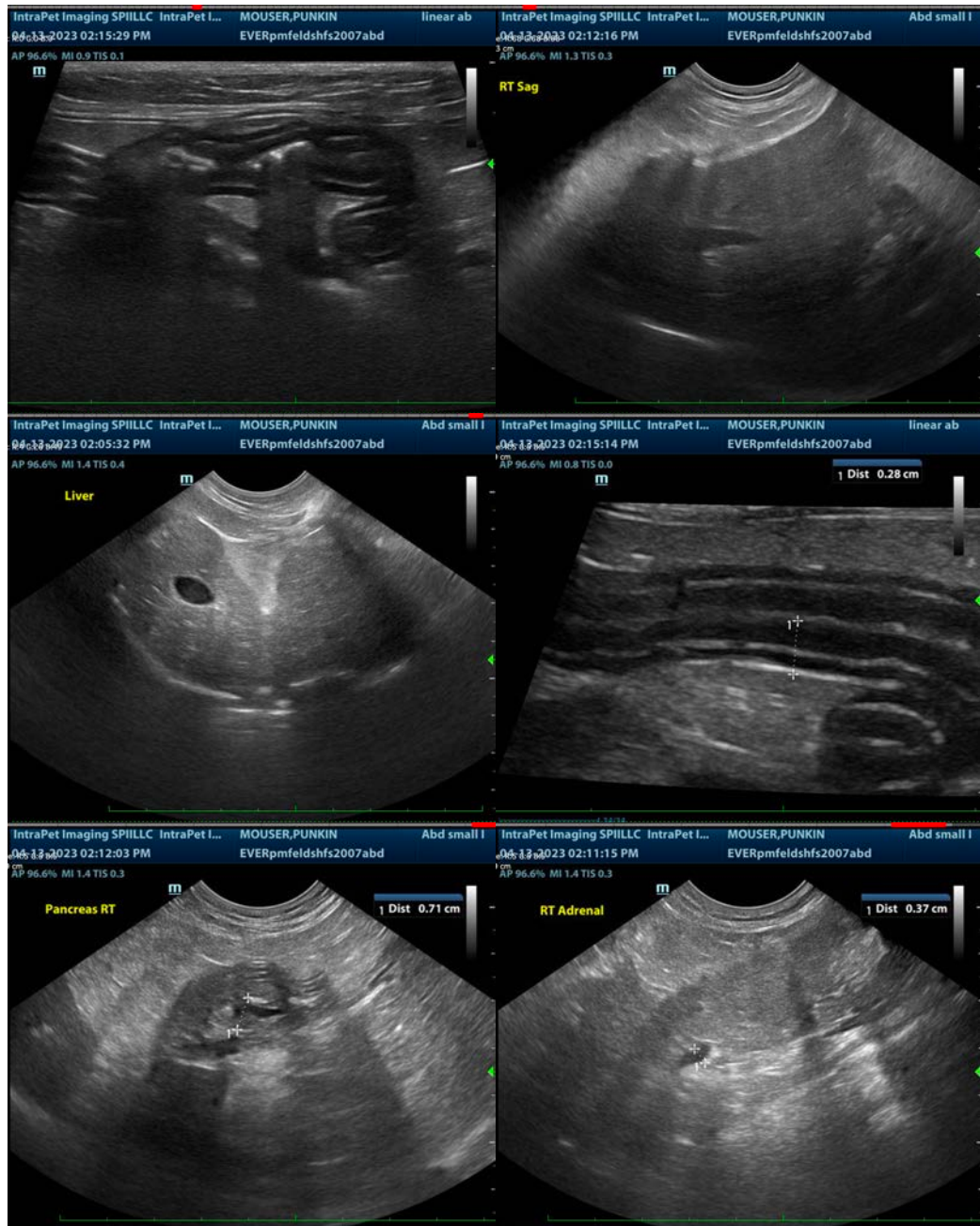
A gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function.

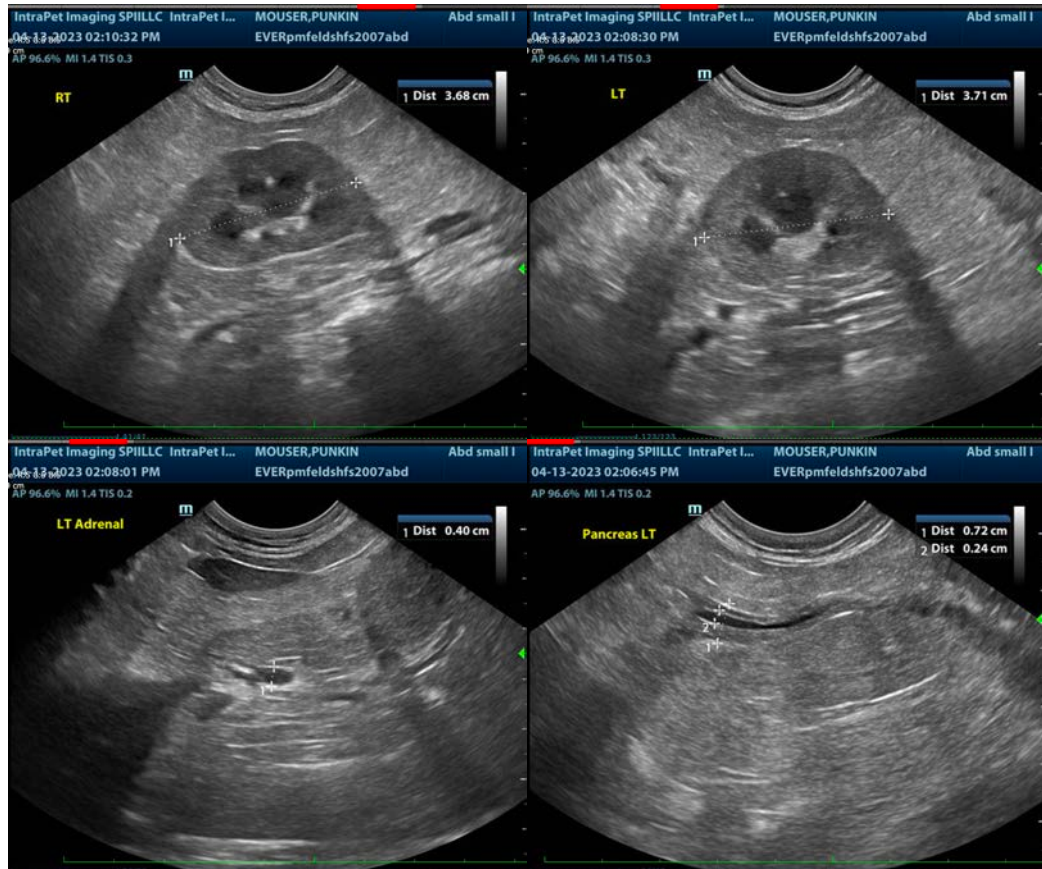
A fine needle aspirate of the liver is recommended if patient's coagulation status is appropriate.

In the meantime, further evaluation of possible diabetes is recommended, beginning with a Fructosamine level to help determine true early diabetes versus stress hyperglycemia. Additionally, tapering of Prednisone to the lowest tolerated dose, and ideally complete discontinuation of the Prednisone, is recommended.

Close monitoring of the blood glucose, ideally at home or via urine glucoses at home to eliminate the stress component, is recommended to help determine whether this is transient diabetes secondary to Prednisolone, which may potentially resolve, versus diabetes mellitus requiring insulin therapy.

Additionally, given this patient's reported marked leukocytosis without an obvious intraabdominal cause, there is some concern about the reported subcutaneous mass. Recommendations include possible culture and sensitivity of the mass, or ideally, histologic evaluation via a biopsy or complete mass excision to rule out an infiltrative neoplasia with secondary inflammation, necrosis, etc. aspirated cytologically.





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