

**DATE PRESENTING CLINICAL SIGNS**

9/27/22

**PATIENT**

Mitzi Harrison

Mitzi is a 10yr old FS DSH. Presented for defecating small amount of feces that are firm. No straining is evident per the owner. Owner reports pet is eating slightly less with no vomiting. Weight appears to be the same per owner. On PE pet seemed to be unsteady on limbs, marked dental tartar, moderate- marked muscle loss on hind limbs. Abdomen palpation was soft and non painful. Intermittent absence of menace response bilateral. Plr normal.

**SPECIES**

Feline

Current Medications: None.

Lab Results: HCT: 29.7, Neutrophilia: 16,750, SDMA: 18, Bun: 13, Total protein: 9.2, Globulin: 6.2.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

**BREED**

DSH

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****SEX**

Spayed Female

**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.

**AGE**

7/19/12

**WEIGHT**

6.8 Pounds

The right kidney is normal in size (3.88 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

**INTERPRETED BY**Beth Johnson, DVM  
DACVIM

The left kidney is normal in size (3.78 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

**IMAGING PERFORMED BY**Stephanie Warga  
RDCS, RVT**Adrenal Glands**

The right adrenal gland is normal in size (0.49 cm), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

**HOSPITAL NAME**

Perry Hall AH

The left adrenal gland is normal in size (0.34 cm), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

**REFERRING VET**

Dr. Aleman

**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). A 0.50 cm in diameter hyperechoic, non-capsule disrupting nodule is noted in the mid body. Splenic vasculature appears normal.

**INVOICE**

41691

**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 is moderately distended with anechoic bile as well as suspended and gravity dependent echogenic debris. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.

### ***Gastrointestinal***

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is mildly distended with very echogenic reverberation artifact from intraluminal gas. There is no evidence of obstruction, foreign material or infiltrative disease; however, complete visualization of far wall is partially inhibited by gas. Pyloric outflow tract appears patent.

The visible small intestines are normal in wall thickness and layering. Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine 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.

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

### ***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.

### ***Free Abdomen***

In the sublumbar area near the aortic bifurcation there is some hypoechoic vascular tissue suspected to potentially be lymph nodes as well as multiple discrete hypoechoic nodules of varying sizes surrounded by enhanced fat along the caudal abdominal body wall.

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

## **PRIMARY FINDINGS**

- **Caudal abdominal body wall nodules** – Rule outs include infiltrative neoplastic versus inflammatory disease.
- Suspect sublumbar lymphadenopathy
- **Hyperechoic hepatomegaly** – This appearance is most consistent with benign hepatic lipidosis. Infiltrative disease such as amyloidosis or round cell neoplasia, such as mast cell tumor or less likely, lymphoma, is also possible.
- **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.

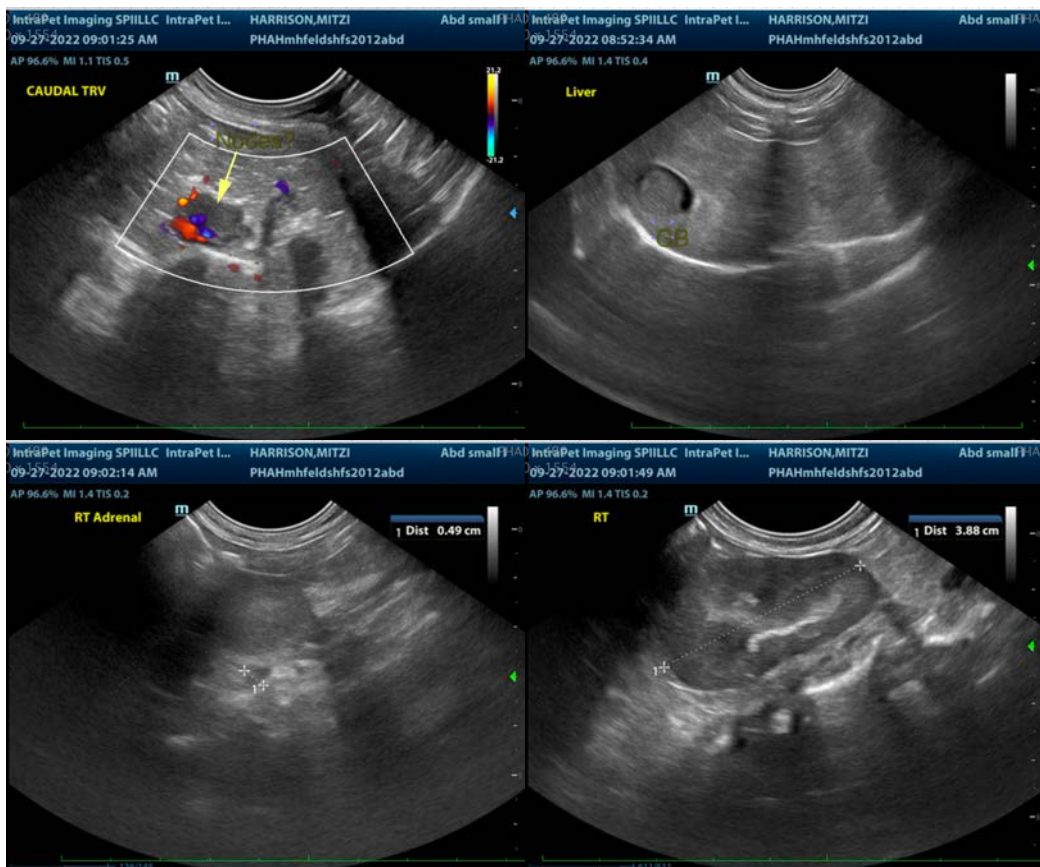
## **SECONDARY FINDINGS**

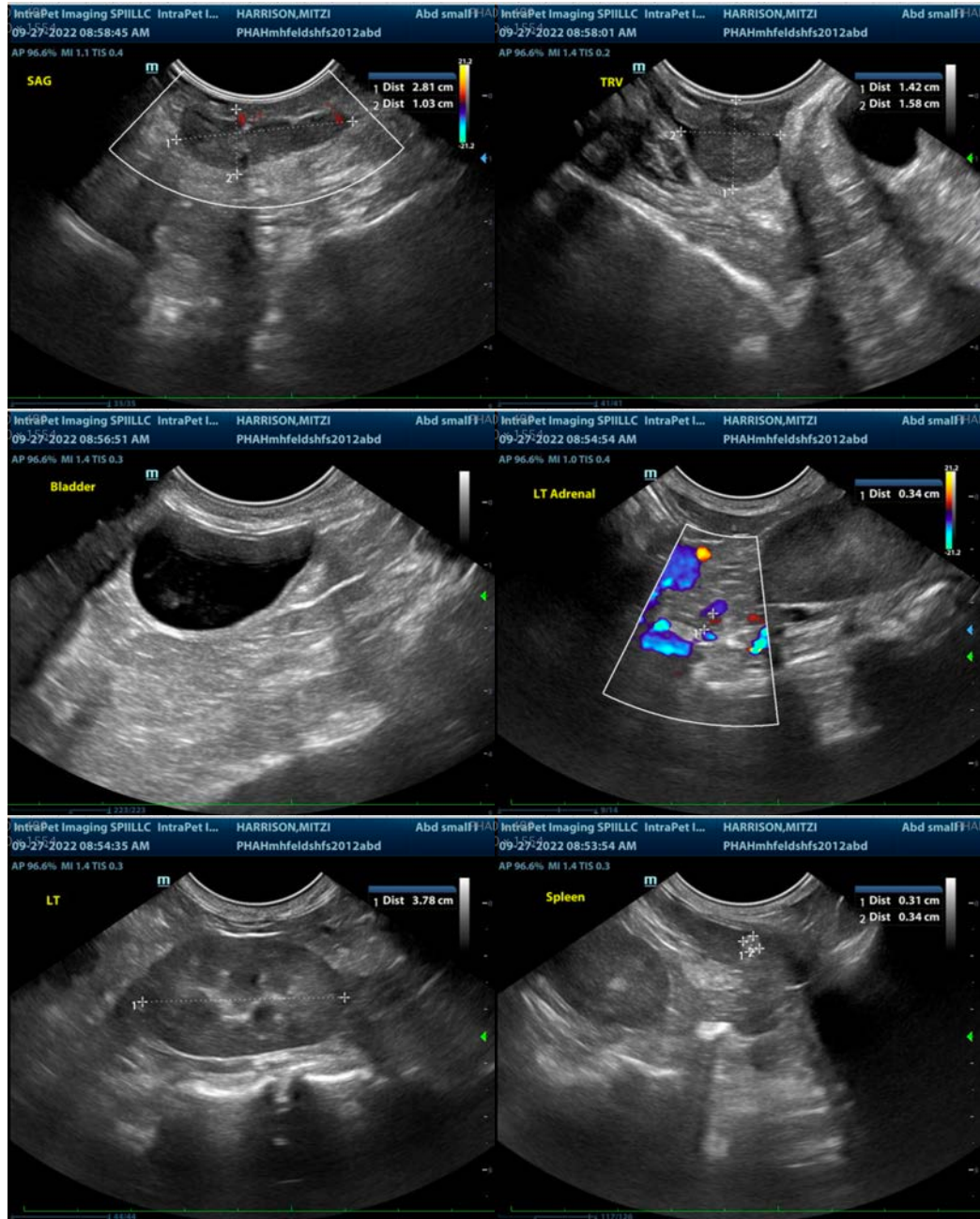
- Urinary bladder debris
- **Hyperechoic splenic nodules** – most consistent with benign myelolipomas. Other differentials such as fibrosis or calcification caused by old hematomas or infarcts, chronic inflammation, granulomatous disease or metastatic disease cannot be ruled out, but are considered less likely.

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Recommendations for this patient include further evaluation of the reported caudal abdominal body wall nodules with a fine needle aspirate if patient's coagulation status is appropriate. If a diagnosis is not obtained cytologically, the nodules may need to be biopsied for definitive diagnosis.

Given the reported hind limb ataxia and the reportedly increased globulins, etc., advanced imaging such as an MRI or potentially CSF tap may also be beneficial, however may not be necessary if a diagnosis can be obtained from the nodules.





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