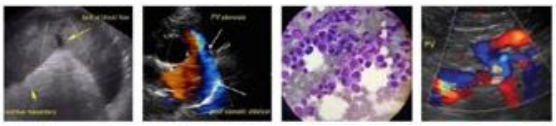




**PATIENT**

Harry Klem

**SPECIES**

Feline

**BREED**

DSH

**SEX**

Neutered Male

**AGE**

12 years

**WEIGHT**

4.4 kg

**INTERPRETED BY**

Beth Johnson, DVM DACVIM

**IMAGING PERFORMED BY**

Kelly Reschny

**HOSPITAL NAME**

Nelson AH

**REFERRING VET**

Gibson

**INVOICE**

13585

**DATE**

7.6.23

## PRESENTING CLINICAL SIGNS

History: Main concern- weight loss. O says he occasionally waxes and wanes and when he dropped in weight in 2020, he came in for an appointment and was re started on prednisolone (as per O). O wants to be preventative and investigate but is aware his cat has muscle wasting from multiple ongoing co morbidities. MCS 3/9 today - hips and spine quite prominent (O says he has slowly been noticing him feeling more bony over time) He is not on any other medications. Has mirtazapine at home but has not used it at all lately, cannot remember when he last used it. Currently eating 5/8 cup of kibble every day. Still has soft stool but this is the normal for Harry with his GI disease. No concerns mobility wise for Harry. Grade III/VI murmur LN normal eyes- N ENT- N Oral cavity- not assessed due to demeanor abdomen- tense on palpation, very difficult to differentiate structures Current Medications prednisolone. Mirtazapine as needed (not using often).

Abnormal PE/Chem/CBC/UA Results: RBC 6.3 Hemoglobin 98 reticulocyte hemoglobin 14.7 creatinine 49 globulin 29 Alb: glob 1.4 ALT 178 AST 97

## 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 overall normal in size (left kidney 3.66 cm) (right kidney 4.38) 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.

### *Adrenal Glands*

Left adrenal gland is normal in size (0.20 cm), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Right adrenal gland is normal in size (0.23 cm), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

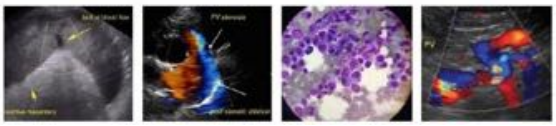
### *Spleen*

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) 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 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.





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### *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. 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 and layering. Contents are consistent with normal formed feces and gas.

### *Pancreas*

The observed pancreas appears appropriately isoechoic to surrounding omental fat. Visible capsule is smooth and normal in contour. Visible pancreatic parenchyma is homogenous and unremarkable. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

### *Free Abdomen*

There is no evidence of peritoneal effusion. There is no apparent lymphadenopathy.

## ULTRASONOGRAPHIC FINDINGS

### Primary Findings

- 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.

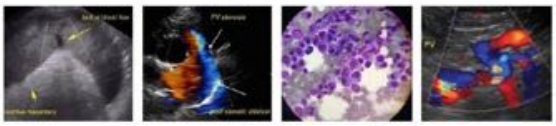
### Secondary Findings

- Age-related kidney changes
- Urinary bladder debris

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is not ultrasonographically visible explanation for this patient's continued weight loss. However, the reported prednisone therapy for historical GI disease could be partially masking pathology. Further investigation of gastrointestinal health (if not recently evaluated) could be considered in the form of 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. Additionally (if not already evaluated), assessment of thyroid health could be considered via T4 and free T4. Additionally, urinalysis and (if indicated based on urinalysis results), urine culture are recommended. If protein is present in an otherwise quiet sediment, protein quantification with a urine protein to creatinine ration is recommended.

Finally, the appearance of the liver is most consistent with steroid administration +/- emerging hepatic lipidosis and should be interpreted in combination of clinical signs and/or laboratory changes that suggest the hepatopathy. If suspicious of a hepatopathy, a fine-needle aspirate of the liver could be considered (if coagulation status of the patient is appropriate).





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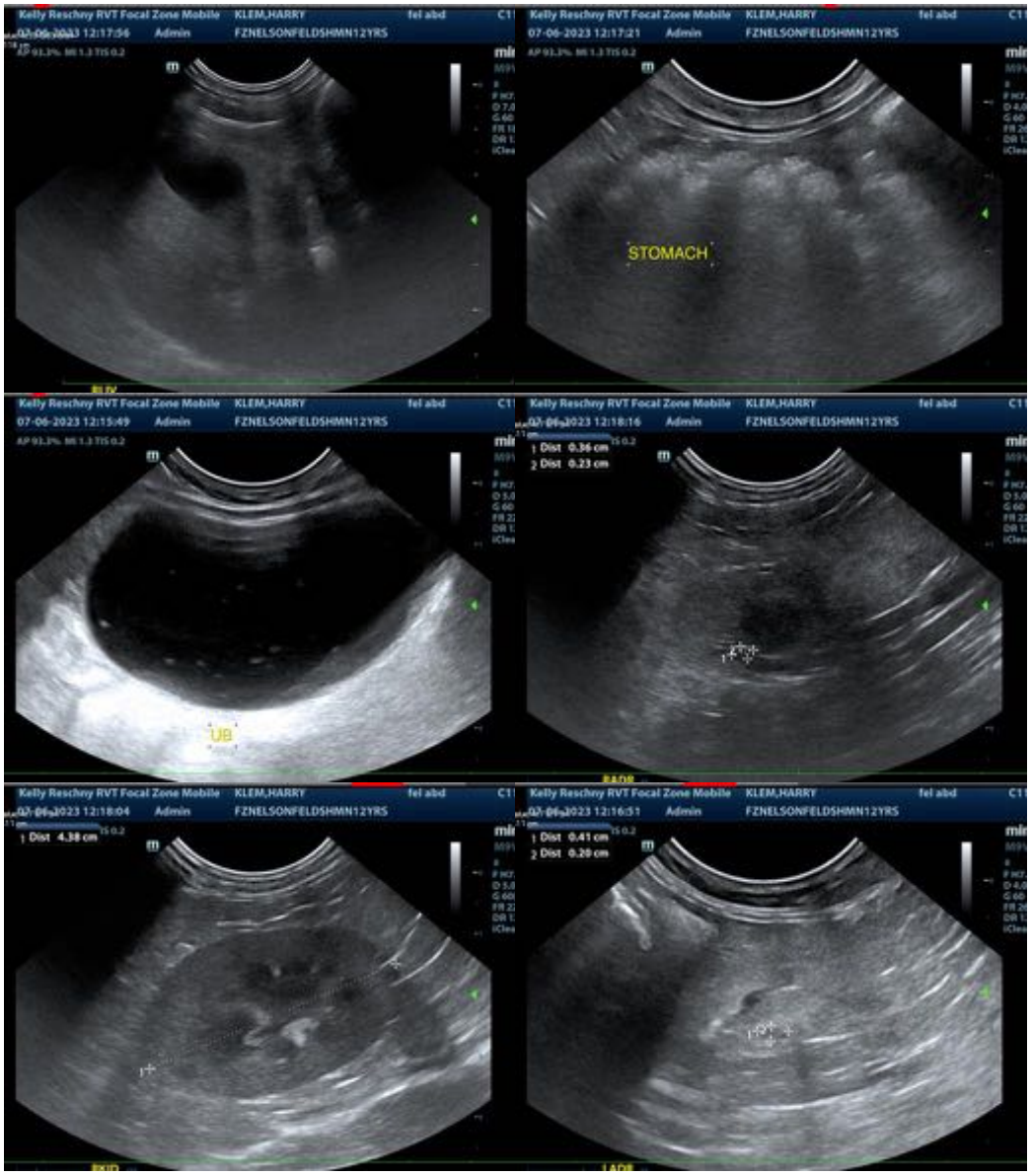
Given the geographic difference in reference ranges, some specialists are not familiar with reference ranges for provided arbitrary values. Therefore, for most thorough interpretation, reference ranges and/or actual attached lab results is helpful.



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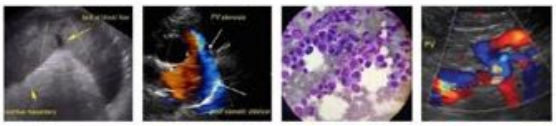

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289-808-2608 info@thefocalzone.com

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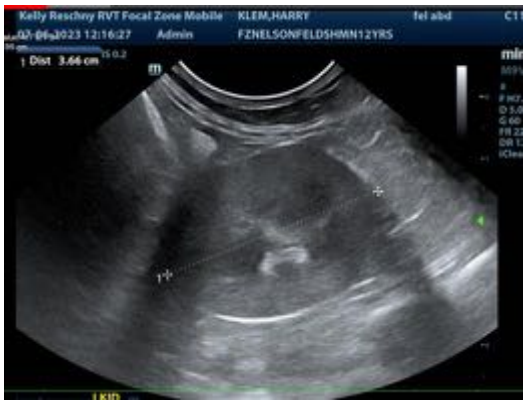


**The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.**

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.

**Beth Johnson, DVM DACVIM**
info@SonoPath.com