IMAGING PERFORMED BY

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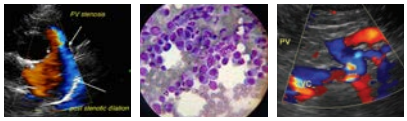

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**DATE**

8/27/21

**PATIENT**

Olive Bergeron

**SPECIES**

Feline

**BREED**

DSH

**SEX**

Spayed Female

**AGE**

5/18/10

**WEIGHT**

9.1 Pounds

**INTERPRETED BY**

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

**HOSPITAL NAME**

Timonium AH

**REFERRING VET**

Dr. Kauder

**INVOICE**

25022

## PRESENTING CLINICAL SIGNS

8-27-2021 / Timonium Animal Hospital / Dr. Kauder
Olive Bergeron
Feline / Domestic Shorthair / Female Spayed / 5-18-2010 / 9.1 Lbs.

History: significant generalized alopecia over past 3-4 weeks. Some overgrooming, but also hair loss in places she can't reach. Skin is normal in most areas, and scaly/dry- right flank & right thigh. Appetite fair- now refuses dry food & eating wet only. No vomiting/diarrhea. Urinating outside the litter box. 2.5-Lbs. weight loss past month. Pet is in diabetic remission since May 2021.

Current Medications: Convenia 0.4ml SQ - 8/21. Hypoallergenic diet trial started 8/21.

Lab Results: chem/cbc/T4/UA-normal.
Radiographs: WNL (full body).
Date of Previous IntraPet Ultrasound: No previous IntraPet scans.
Sedation: Sedation not required for scan.
Stat Report: STAT report not requested by the veterinarian.

## 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 (3.81 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 (4.41 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 to large in size measuring 0.51 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/large in size measuring 0.60 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 large in size, and normal in echogenicity with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and

biliary tract appear normal. There are numerous hepatic nodules visualized. Some are indistinct, hyperechoic nodules within the parenchyma measuring from 0.75-1.5 cm. There is also a more distinct, slightly hyper- to isoechoic nodule towards the periphery of the liver margin, measuring 1.71 cm, which deforms the liver margins. Overall the liver is somewhat lumpy and nodular/irregular.

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are primarily anechoic. The cystic duct is clearly visualized and appears somewhat dilated and tortuous, measuring 0.44 cm. An obstruction is not visualized.

### *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 relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. Jejunum wall measured 0.18 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. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

### *Pancreas*

The pancreas is prominent and hypoechoic as compared to the surrounding isoechoic mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

### *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

- Borderline bilateral adrenomegaly – These adrenals are prominent and hypoechoic. This can be an indicator of stress/illness, or of primary adrenal disease.
- Prominent, hypoechoic pancreas – The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.
- Heterogeneous liver with indiscreet and discreet nodules – Hepatic changes are non-specific and could be consistent with inflammation/infection (cholangiohepatitis), infiltrative neoplasia, lipidosis or other hepatopathy.
- Shadowing material in the stomach – correlate with feeding history. This could be consistent with ingesta, hairball, other.

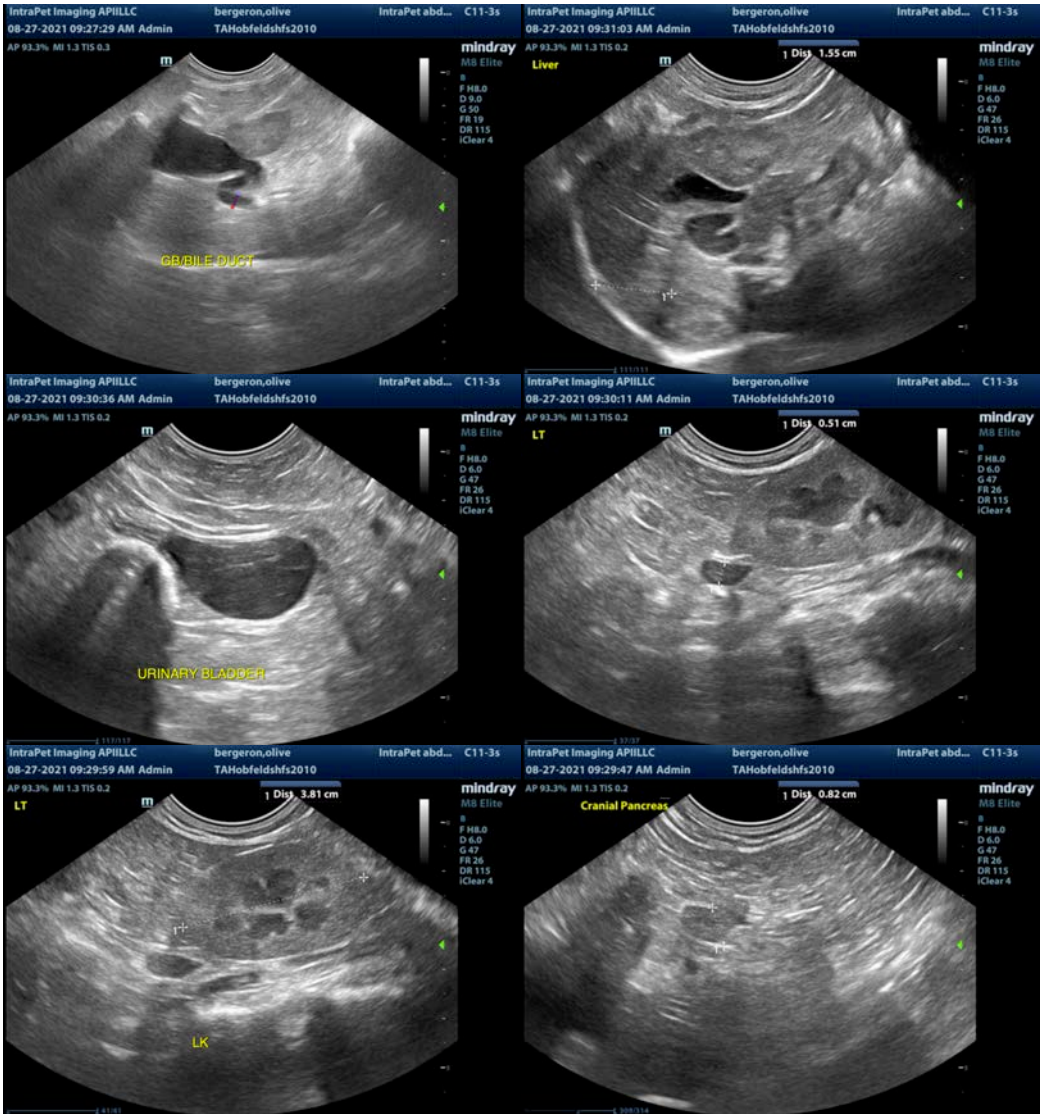
## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

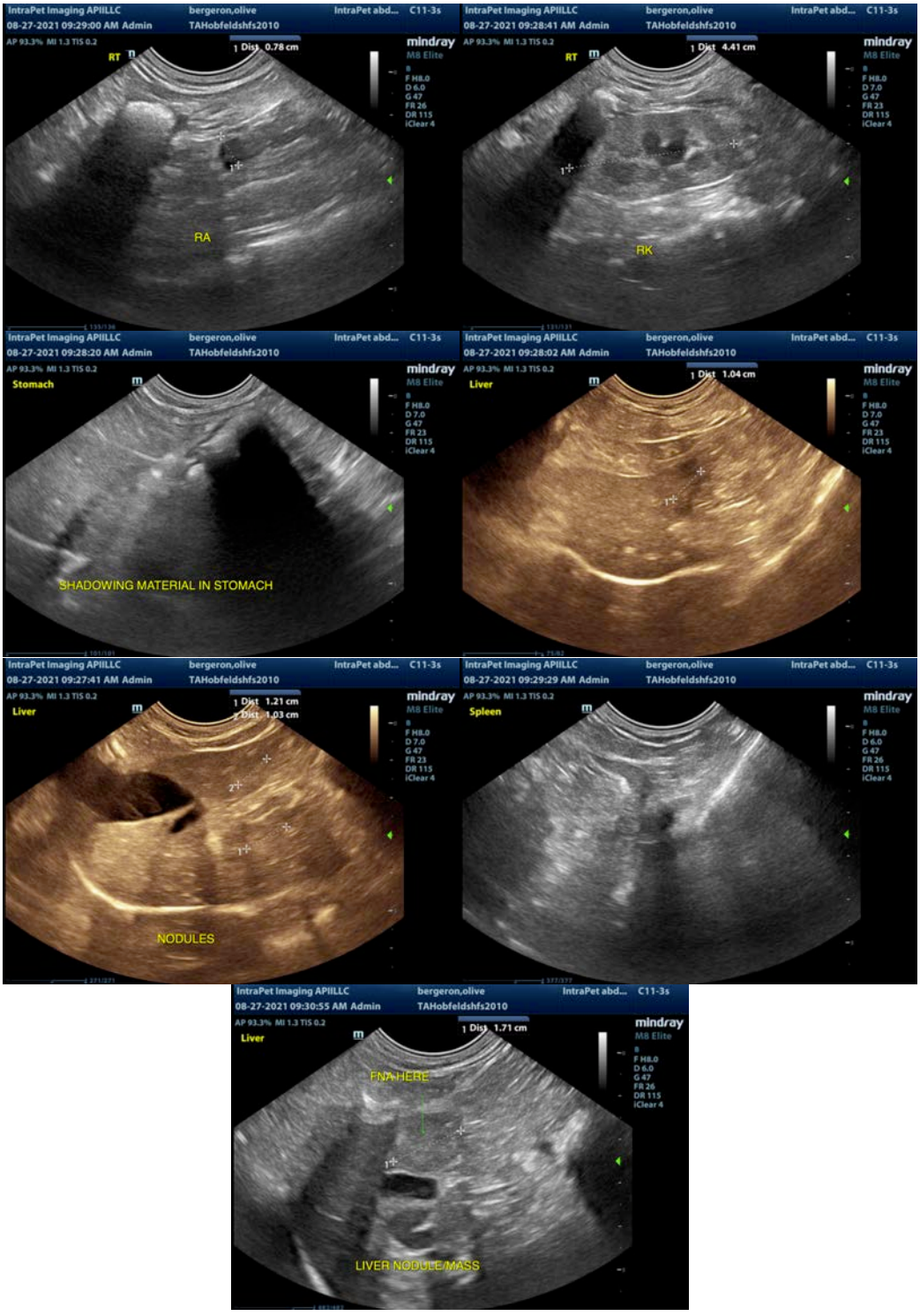
Interpretation of the large adrenal glands is somewhat difficult in a sick cat that is in diabetic remission. Classically, diabetic cats with Cushing's disease have insulin resistance, so this tends to make me inclined to thick the enlarged adrenals could be associated with a primary illness (stress induced). Alternately, this could

be Cushing's disease with an atypical presentation.

Additionally, the liver is very abnormal. Recommend a fine needle aspirate of the liver, if possible of one of the more defined masses (see images). If adrenal function testing is considered, then recommend the combination ACTH stim/Low-dose Dexamethasone test. I like using the Michigan State's endocrine lab, as their endocrinologists are very helpful in interpreting test results and answering questions. No lesions were observed associated with the GI tract, but the pancreas is prominent. Consider GI panel with a quantitative fPLI and B12 and folate level to further evaluate these issues. Keep in mind that significant GI disease can be present without significant ultrasonographic changes.

Lastly, there is shadowing material within the stomach. The significance of this unclear. Correlate with radiographic findings. This could be ingesta or hairball.

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bergeron,olive
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C11-3s
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TAHobfeldshfs2010
mindray
M8 Elite
RT
1 Dist 0.78 cm
RA
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1 Dist 4.41 cm
RK
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Stomach
SHADOWING MATERIAL IN STOMACH
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Liver
1 Dist 1.04 cm
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Liver
1 Dist 1.21 cm
2 Dist 1.03 cm
NODULES
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Spleen
08-27-2021 09:30:55 AM Admin
Liver
1 Dist 1.71 cm
FNA HERE
LIVER NODULE/MASS

**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