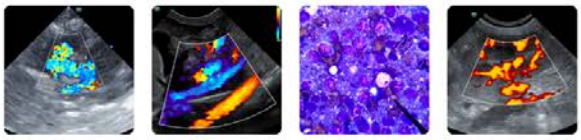


DATE

11/21/25

PATIENT

Benny Laakso

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

4/6/20

WEIGHT

6.4 lbs

INTERPRETED BY

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

HOSPITAL NAME

Animal Emergency Hospital

REFERRING VET

Dr. Reynolds

INVOICE

72026

PRESENTING CLINICAL SIGNS

Patient History: Presenting Complaint: Benny laakso presents for referral from primary veterinarian for progressive lethargy over the last 5 days, following an increase in insulin dose. Patient History: - Diagnosed with diabetes mellitus approximately 1.5 months ago. Initial diagnosis in September 2025. - Insulin dose has been progressively increased since diagnosis. - Started on 1 unit BID in September; client reports he improved on this dose. - Was on 2 units BID for one month. - Dose increased to 3 units Prozinc insulin BID 5 days ago, following a Fructosamine test. Administered at 6:30 am and 6:30 pm with meals. - Clinical signs for the past 5 days: - Marked lethargy, similar to signs observed prior to his initial diabetes diagnosis. Today, he did not greet the client at the door. - Appetite is reportedly fine, though he was less eager to eat this morning. He ate all of his wet food but the client did not add the dry food topper. - Increased water intake. - History of being food-aggressive since starting insulin. - No vomiting or diarrhea reported in the last 5 days. Past vomiting was associated with dietary indiscretion. - No coughing or sneezing. - Adopted from a rescue 7 months ago. - Past medical history:- Suspected history of urinary crystals prior to adoption. He was on a urinary diet at the rescue. - No urinary issues noted since adoption.- Client first noticed weight loss in late July 2025. - Diet: - Previously on Hills C/D dry food at the rescue for reported crystals - Switched to wet food after diabetes diagnosis. - Currently eating Purina DM wet food. Was eating 1/2 of a 5-ounce can for breakfast, lunch, and dinner. - 5 days ago, the referring veterinarian recommended increasing to two-thirds of a can per meal, with Purina DM dry food sprinkled on top to encourage weight gain. - Medications: Prozinc insulin, 3 units BID. No other medications. - Environment: - Indoor only. - Lives with one other cat. They tolerate each other. rDVM labwork: UA: 4+ BLD, 3+ ketones, 4+ Glu, 1+ Pro, 3+ Leu, pH 6 Fructosamine on 5/14: 635 (high end 350). T4- normal in September 2025

Current Medications: Ondansetron, mirtazapine, gabapentin
Labwork Results: Labwork attached.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: STAT requested.
Imaging Performed by: Rachel Brilhart, RDMS.

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 is borderline large (4.89 cm) and swollen in appearance. The cortex is of increased echogenicity with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is borderline large (5.25 cm) and swollen in appearance. The cortex is of increased echogenicity with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal 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 0.40 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 0.37 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 (0.54 cm), 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 with rounded margins. The parenchyma is hyperechoic and homogenous in 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 moderate amount of non-organized echogenic debris extending into the cystic duct. 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 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. Duodenum wall measures 0.28 cm. Jejunum wall measures 0.24 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

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 normal and isoechoic to surrounding 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. No significant lymphadenopathy. The omentum is mildly diffusely hyperechoic.

A view of the heart is submitted. There is a small amount of pericardial effusion noted (0.25 cm rim). No focal mass lesions are observed. Recommend full echocardiogram.

ULTRASONOGRAPHIC FINDINGS

- Large, hyperechoic kidneys with decreased corticomedullary distinction – Findings are suggestive of underlying renal disease.
- Large, hyperechoic liver – Hepatic changes are non-specific and could be consistent with hepatic lipidosis, inflammatory/infectious disease, infiltrative neoplasia, or other hepatopathy.
- Moderate gallbladder debris – The significance of the aggregated gallbladder debris is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting. Incidental gall bladder debris is less common in cats.
- Small amount of pericardial effusion.

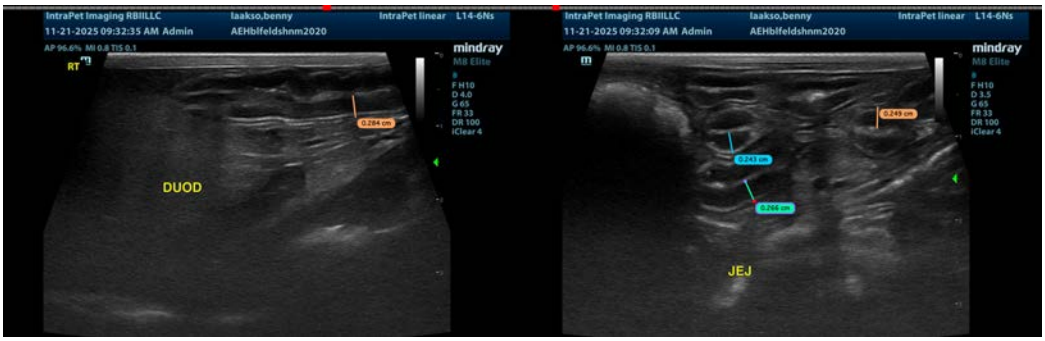
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

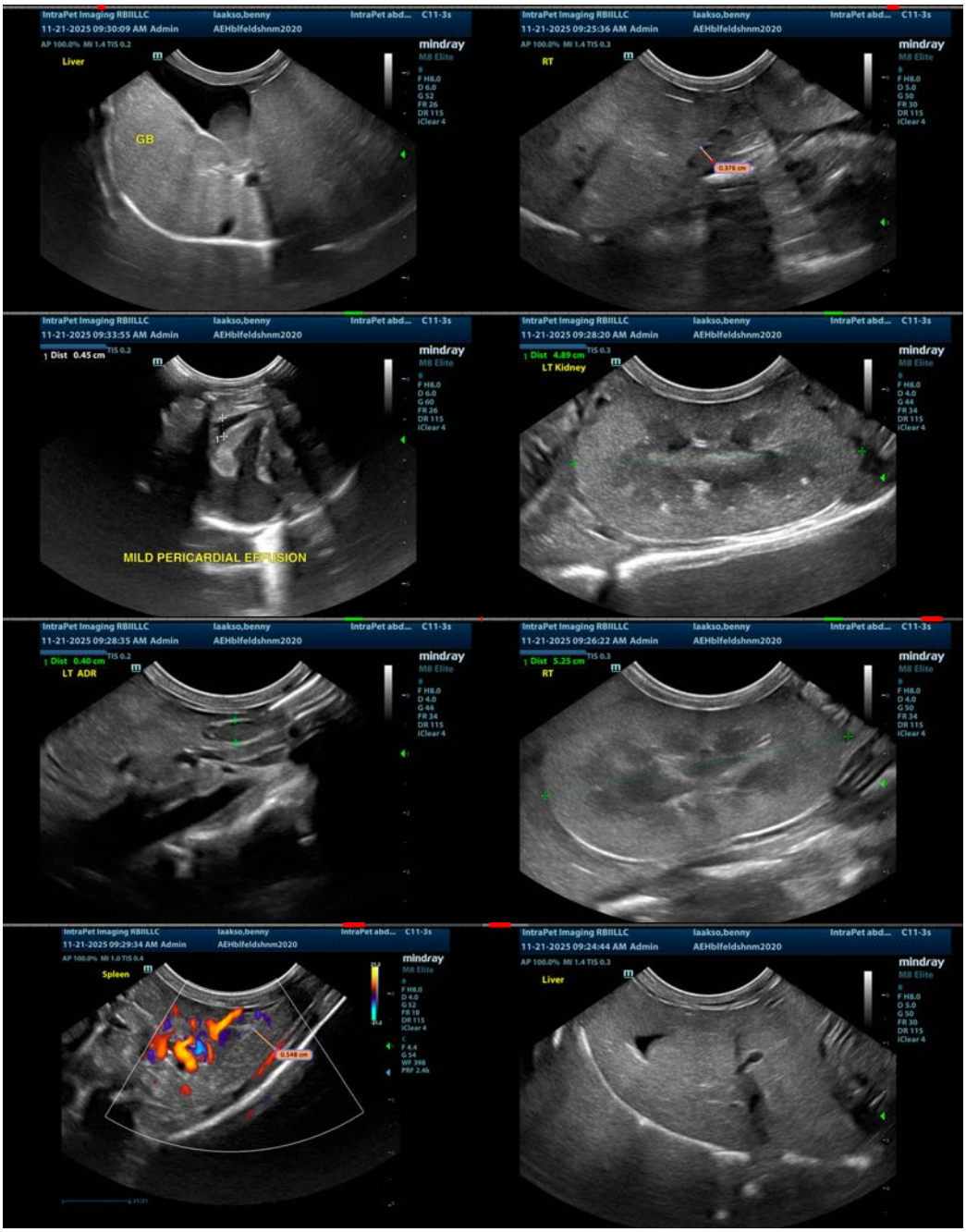
The liver is large and hyperechoic. This a common finding in diabetics, likely secondary to a diabetic hepatopathy, although this case is unusual. You could consider a liver function test and a fine needle aspirate of the liver (provided coagulation parameters are normal) if there is any concern for underlying round cell neoplasia, etc.

Both kidneys appear somewhat large and hyperechoic. Correlate these findings with renal values, urine concentrating ability, urine culture, blood pressure, and urine protein to creatinine ratio. If insulin regulation is challenging, you could consider evaluation for growth hormone excess based on some of the organomegaly visualized (although this seems like a small cat in general).

Recommend stabilization in hospital with injectable insulin and regulation to see if the patient feels better with normal glycemia and rehydration. It is likely that dosing changes will have to be made on glucose curves, as this patient may be too fragile for management with Fructosamine levels.

An obvious cause for the pericardial effusion is not visualized. Consider a full cardiac ultrasound to further evaluate, and 3-veiew thoracic radiographs.

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laakso,benny
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RT
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Spleen
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Liver

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.

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