

**DATE PRESENTING CLINICAL SIGNS**

12/3/21 History: Decreased appetite since Oct. Sporadic vomiting and diarrhea
Painful back 11/26/21; slight hunched appearance.

PATIENT

Belle Valcarenghi

Current Medications: Galliprant 20mg 1 sid started 11/27/21, Metronidazole 50 mg started 11/20/21, restarted 11/27/21.

Lab Results: chemistry/cbc within normal limits; urinalysis- sg 1014, proteinuria.

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

SPECIES

Canine

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

BREED

Dachshund

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.

SEX

Intact Female

The left kidney has a normal shape and size (4.54 cm) with pinpoint non-obstructive nephroliths. Overall echogenicity is slightly hyperechoic with poor 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, infarcts or hydroureter. Renal vasculature is normal.

AGE

10/15/07

WEIGHT

16.7 Pounds

The right kidney has a normal shape and size (4.75 cm) with non-obstructive nephroliths. One nephrolith is visualized measuring 0.38 cm. Overall echogenicity is slightly hyperechoic with poor 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, infarcts or hydroureter. Renal vasculature is normal.

INTERPRETED BY

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

Adrenal Glands

The left adrenal gland is normal/borderline large in size measuring 0.75 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.

IMAGING PERFORMED BY

Andi Parkinson RDMS

The right adrenal gland is normal/prominent in size measuring 0.65 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.

HOSPITAL NAME

Honeygo AH

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.

REFERRING VET

Dr. Mullenex

Liver

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is mildly heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

INVOICE

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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. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7cm 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 measured 0.42 cm. Jejunum wall measured 0.34 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 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, 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.

Other

Both ovaries are visualized and appear somewhat cystic. The left ovary measures 2.3 cm in length, and the right measures 2.29 cm.

PRIMARY FINDINGS

- Decreased corticomedullary distinction in both kidneys with non-obstructive nephroliths – Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis.
- Moderate gallbladder sludge – The significance of the aggregated gallbladder sludge is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting.
- Mildly heterogeneous liver – The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy.

SECONDARY FINDINGS

- Prominent adrenal glands – The bilateral adrenomegaly could be consistent with bilateral hyperplasia (e.g., secondary to pituitary-dependent hyperadrenocorticism), bilateral infiltrative neoplasia, inflammatory adrenal disease, other. Correlation with clinical findings is recommended.
- Cystic ovaries – This is likely an age related/incidental change.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No focal lesions were identified to explain the decreased appetite reported. The changes visualized in the liver and kidneys are likely age related progressive changes provided lab work is normal.

The adrenal glands are prominent, but this can be a common finding in Dachshunds, and without signs of Cushing's disease I would be hesitant to pursue adrenal function testing.

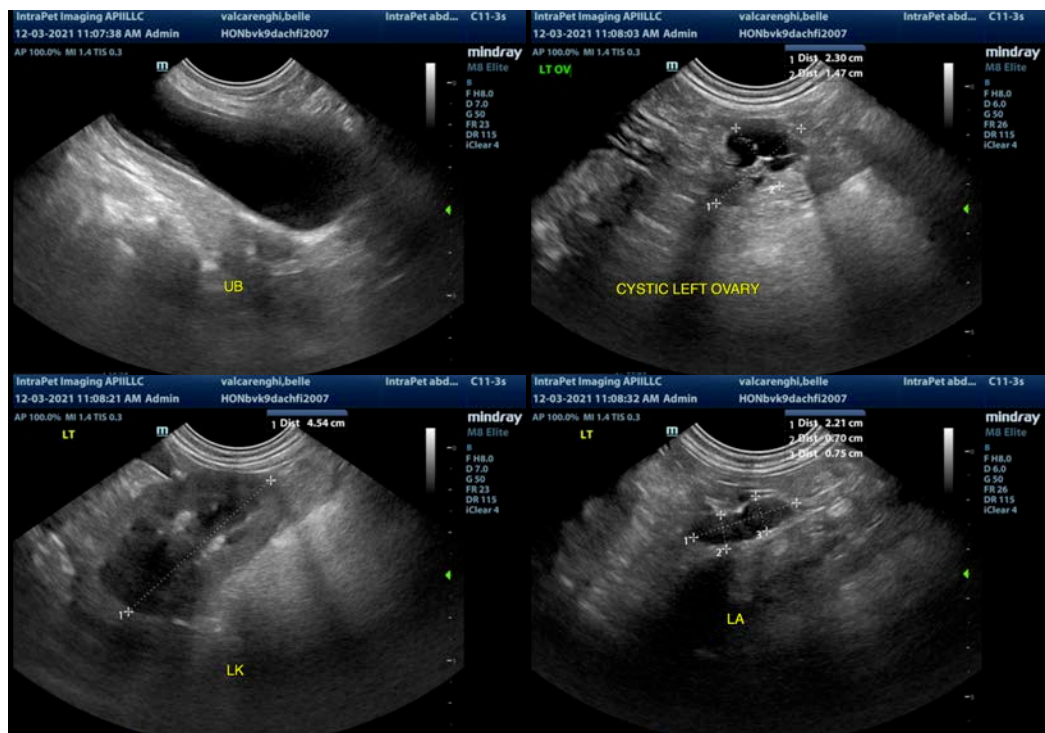
There is moderate sludge in the gallbladder, but if liver enzymes are normal, this can be monitored.

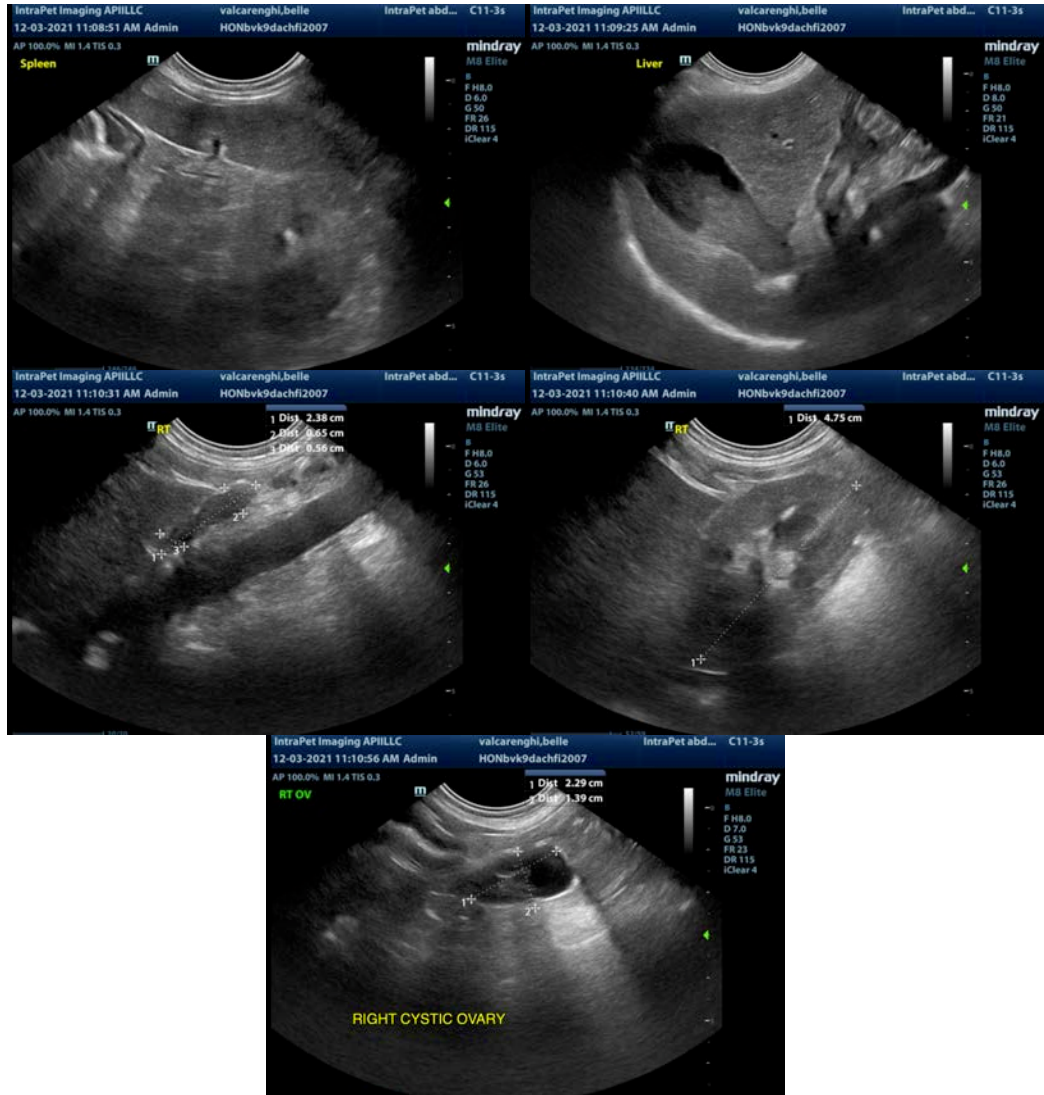
It is not uncommon to have underlying GI disease and minimal ultrasonographic changes. If this is suspected based on clinical signs, etc., you could consider:

- A GI panel to Texas A&M to get a quantitative PLI, TLI, cobalamin and folate to further evaluate the pancreas and small intestine.
- Trying a change to a novel protein/prescription diet, as dietary sensitivity, IBD, and less likely underlying neoplasia would be possible GI differentials.
- Consider chronic probiotic therapy.
- If GI symptoms persist, consider obtaining GI biopsies.

This patient remains intact. There is not any pathology noted associated with the reproductive tract, but this is always a concern for development. If surgery is pursued, consider and ovariectomy at that time.

Recommend a urine protein/creatinine ratio, urinalysis and culture due to the proteinuria described. Recommend blood pressure evaluation. If significant proteinuria is present, you could consider starting medical therapy for this issue.





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