

IMAGING PERFORMED BY

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Clinical Sonography & Telecytology

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DATE PRESENTING CLINICAL SIGNS

1/3/23 Weight loss and elevated ALP & ALT.

PATIENT

Vanna Vandegiessen

Current Medications: Intermittent Carprofen use.
Lab Results: ALT 223, ALP 137, Precision PSL 339.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Declined.

SPECIES

Canine

Imaging Performed By: Rachel Brillhart, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

BREED

Bouvier des Flandres

Urinary System

Urinary bladder is adequately distended with primarily anechoic contents and occasional echogenic non-shadowing debris. Apical urinary bladder wall is diffusely thick (0.47 cm). Mucosa is hyperechoic and irregular. No masses or cystoliths are observed. The trigone and visible pelvic urethra are normal thickness with a smooth mucosal surface.

SEX

Spayed Female

The right kidney is normal in size (6.57 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.

AGE

7/8/09

The left kidney is normal in size (6.81 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.

WEIGHT

81 Pounds

Adrenal Glands

The right adrenal gland is normal in size (3.09 cm long x 0.99 cm at the cranial pole and 0.71 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

INTERPRETED BY

Beth Johnson, DVM
DACVIM

The left adrenal gland is normal in size (2.8 cm long x 0.76 cm at the cranial pole and 0.66 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

HOSPITAL NAME

All Creatures
Veterinary Service

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). No focal nodules or masses are observed. Splenic vasculature appears normal.

REFERRING VET

Dr. Keys

Liver

Diffusely, the liver is subjectively enlarged with mildly irregular margins. Parenchyma is heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. Focally, in the mid caudal liver there is 5.0 cm round homogeneous iso- to slightly hypoechoic mass. Visible vasculature and biliary tree appear normal without distension or congestion.

INVOICE

43875

The 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.

Gastrointestinal

The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is empty with 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 (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with 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

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

There is no apparent lymphadenopathy noted in these images.

In the mid abdomen, there is non-specific enhanced hyperechoic mesenteric fat noted.

ULTRASONOGRAPHIC FINDINGS

- **Diffusely heterogenous Liver** – These changes are most consistent with benign processes such as nodular hyperplasia, steroid (vacuolar) hepatopathy, extramedullary hematopoiesis or possibly chronic inflammatory disease and less commonly infiltrative round cell or metastatic neoplasia. The focal liver mass could represent a benign marked nodular hyperplasia or hepatoma/adenoma versus other. However, infiltrative neoplasia, including a well differentiated hepatocellular carcinoma or even sarcoma, round cell neoplasia, etc. cannot be definitively ruled out.
- **Non-specific enhanced mesentery fat** – Suggests inflammatory changes, possibly related to some diffuse subclinical gastroenteritis or bowel disease, or potentially represents inflammation secondary to pancreatitis versus other.
- **Chronic Cystitis** - Urinary bladder wall changes are most consistent with chronic cystitis. Infiltrative neoplasia cannot be ruled out but is considered less likely give the location and diffuse nature of the changes.

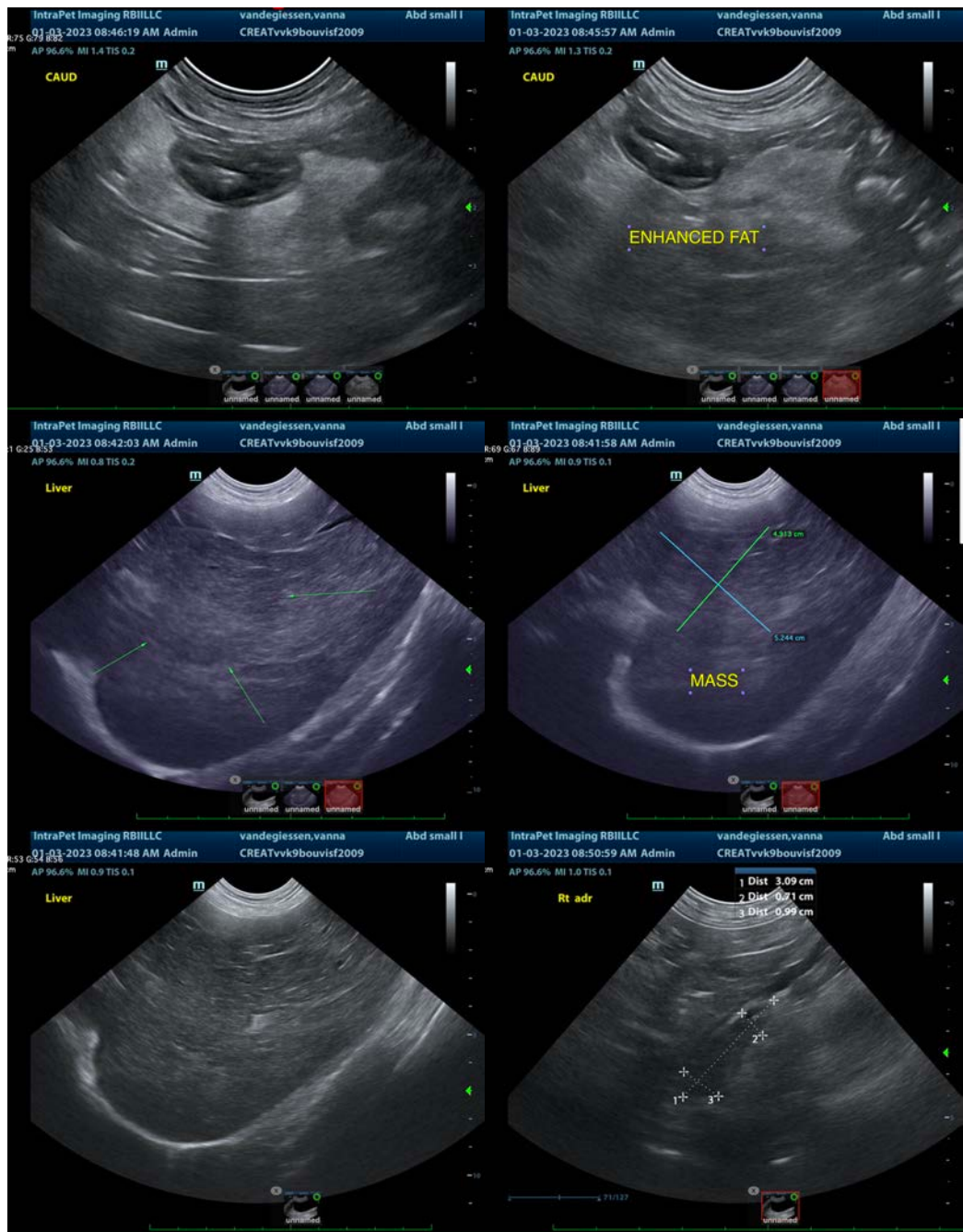
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

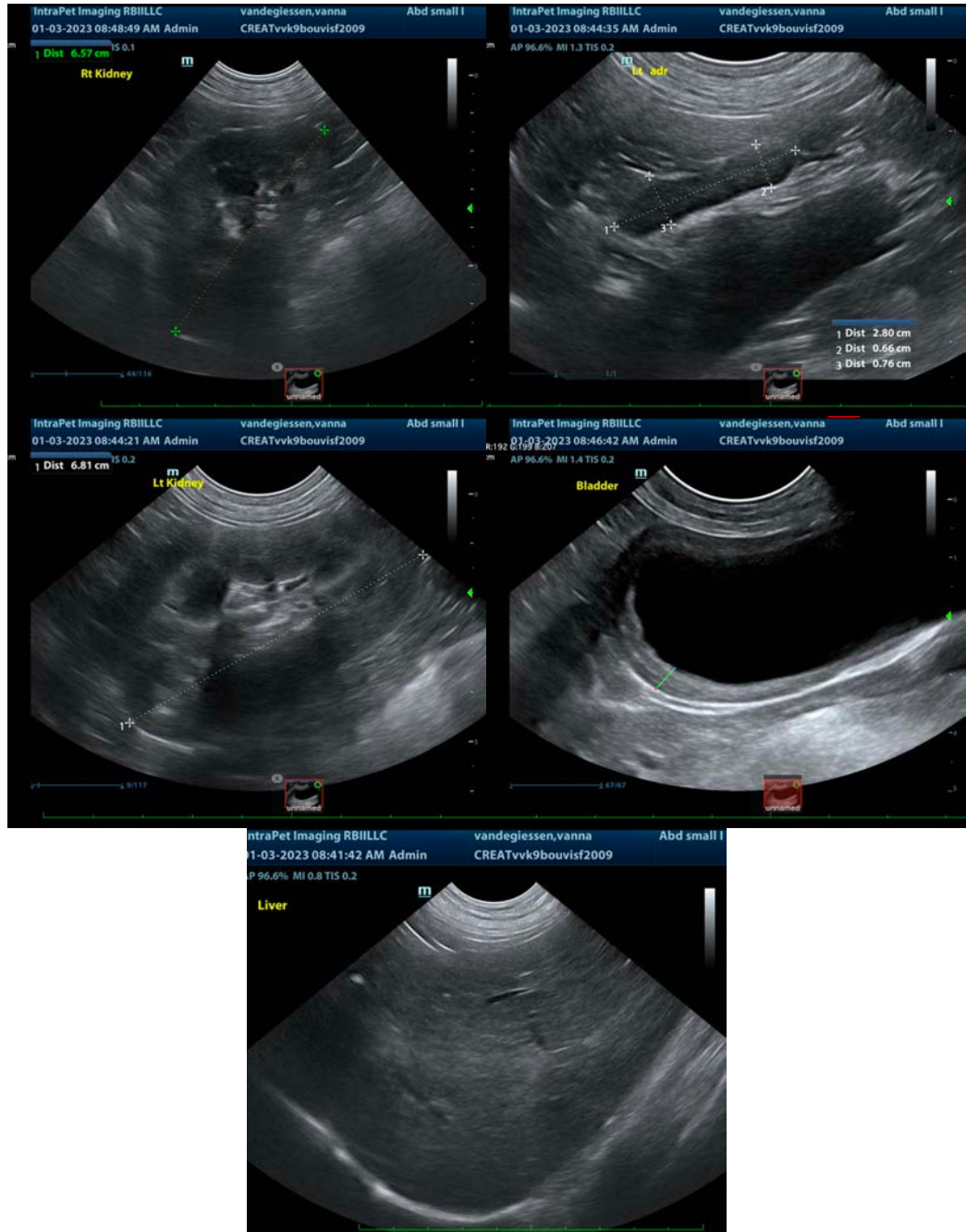
Three view thoracic radiographs are recommended for further assessment of cardio-pulmonary status as well as to further evaluate for any evidence of metastatic disease, if not recently evaluated.

A fine needle aspirate of the liver mass is recommended if patient's coagulation status is appropriate. Alternatively, if surgical excision is preferred, an exploratory laparotomy could be considered, as the mass appears likely fully resectable. However, full resectability cannot be guaranteed based on ultrasound alone.

Given the evidence of subtle inflammation regarding the bowel or potentially pancreas, 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.

If not recently evaluated, 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 ratio is recommended.





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
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