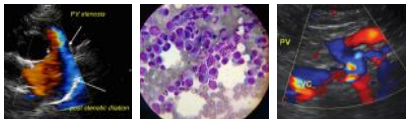
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
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DATE
12/5/22

PATIENT
Kodak Kwiatkowski

SPECIES
Canine

BREED
Husky

SEX
Neutered Male

AGE
8/15/12

WEIGHT
86 Pounds

INTERPRETED BY
Beth Johnson, DVM DACVIM

HOSPITAL NAME
Essex Middle River VC

REFERRING VET
Dr. Franchini

INVOICE
19006

PRESENTING CLINICAL SIGNS

History: Pet presented on 11/14/2022 for exam and vaccines. Owner reported no concerns. (seen by a relief dr). When reporting results, owner did mentioned pet has been drinking more.

Current Medications: None listed.
Lab Results: low HCT, elevated Ca, elevated ALT and ALKP
Date of Previous IntraPet Ultrasound: No previous.
Sedation: IV Torb.
Stat Report: Not requested.
Imaging Performed By: Rachel Brilhart, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

Urinary bladder is adequately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

Prostate is normal in size, echotexture and echogenicity for a neutered male.

Left kidney is normal is size (8.16 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.

Right kidney is normal is size (8.18 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. A 1.5 cm x 1.7 cm cystic area was noted in the caudal pole of the right kidney with septations.

Adrenal Glands

Right adrenal gland is normal in size (2.49 cm long x 0.82 cm at cranial pole and 0.79 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Left adrenal gland is normal in size (2.81 cm long x 0.71 cm at cranial pole and 0.78 cm at caudal pole), 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

There is some normal appearing liver, primarily on the right side, however, the majority of the liver is involved in what appears to be two separate, large, heterogenous, partially cavitated masses, measuring between 9-12 cm in diameter each, depending on the view. The masses appear to involve primarily the left side with one being deep along the diaphragm and one appearing more superficial/caudal.

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 visible stomach wall is normal in thickness 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. 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 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

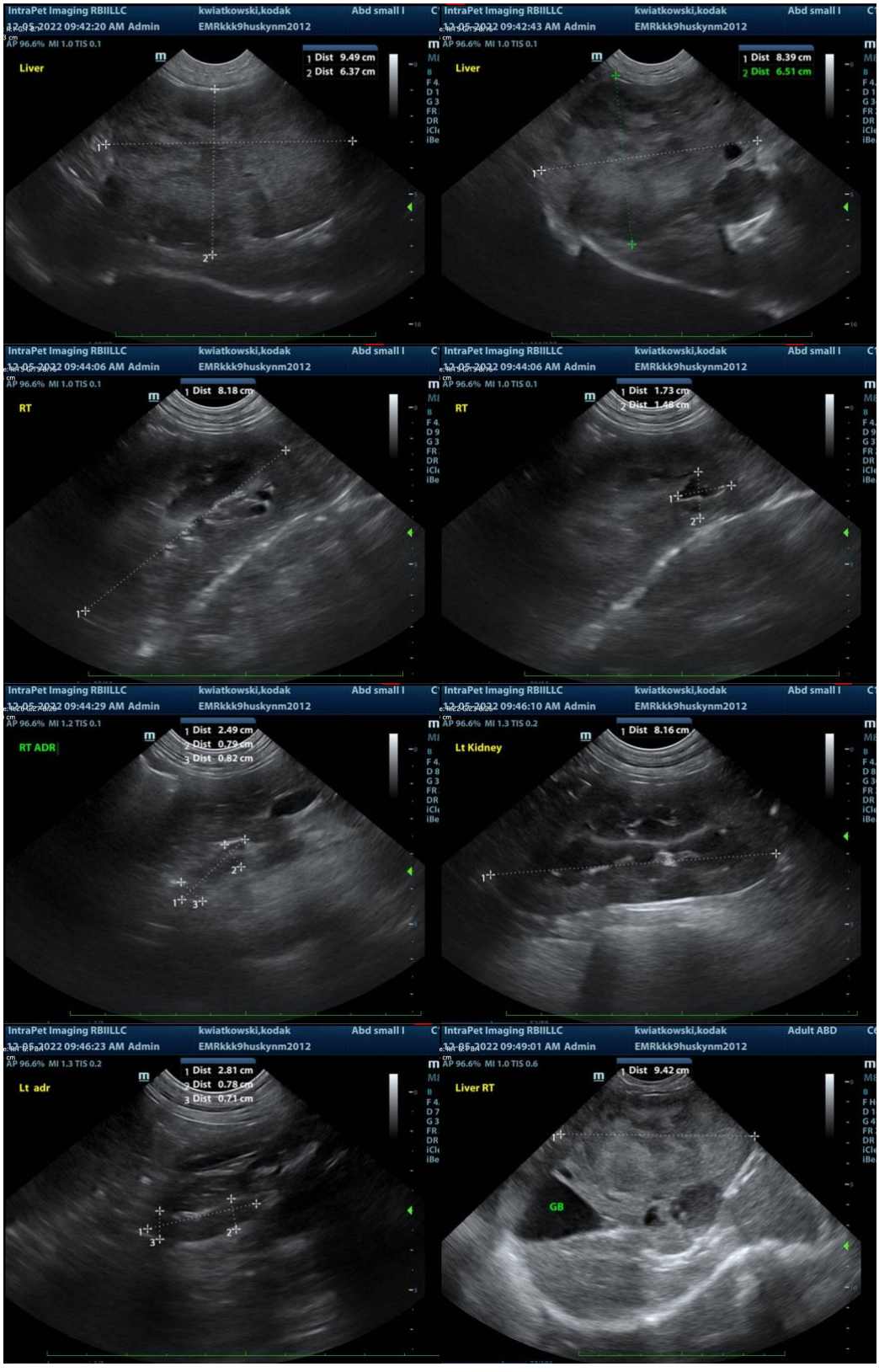
- Multiple heterogenous cavitated liver masses. This is concerning for infiltrative neoplasia such as round cell neoplasia, especially given the reported concurrent hypercalcemia versus sarcoma versus hepatocellular carcinoma versus other. Benign processes are possible but considered much less likely.
- Cystic lesion in the caudal pole of the right kidney. This is likely an incidental cortical cyst, possibly a complex cyst, however, given the septations noted, an abscess or even neoplastic nodule (while considered less likely) cannot be definitively ruled out.

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.

Further evaluation of the hypercalcemia is recommended in the form of a malignancy panel to include PTH, PTHrP, and ionized calcium to help determine whether or not the hypercalcemia is related to the liver masses versus other, such as unrelated hyperparathyroidism, etc.

A fine needle aspirate of the liver masses could be considered if patients coagulation status is appropriate or alternatively, given the cavitated nature and risk for hemorrhage, etc., in the future, an exploratory laparotomy with planned excisional biopsies/mass removal (if possible) could be considered. Given the size and multifocal nature of the masses, full resectability cannot be determined. Therefore, if surgery is elected, a presurgical planning abdominal CT scan may be beneficial.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kwiatkowski,kodak
Abd small I
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AP 96.6% MI 1.0 TIS 0.1
Liver
1 Dist 9.49 cm
2 Dist 6.37 cm
IntraPet Imaging RBIILLC
kwiatkowski,kodak
Abd small I
12-05-2022 09:42:43 AM Admin
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AP 96.6% MI 1.0 TIS 0.1
Liver
1 Dist 8.39 cm
2 Dist 6.51 cm
IntraPet Imaging RBIILLC
kwiatkowski,kodak
Abd small I
12-05-2022 09:44:06 AM Admin
EMRkkk9huskynm2012
AP 96.6% MI 1.0 TIS 0.1
RT
1 Dist 8.18 cm
IntraPet Imaging RBIILLC
kwiatkowski,kodak
Abd small I
12-05-2022 09:44:06 AM Admin
EMRkkk9huskynm2012
AP 96.6% MI 1.0 TIS 0.1
RT
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2 Dist 1.48 cm
IntraPet Imaging RBIILLC
kwiatkowski,kodak
Abd small I
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AP 96.6% MI 1.2 TIS 0.1
RT ADR
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2 Dist 0.79 cm
3 Dist 0.82 cm
IntraPet Imaging RBIILLC
kwiatkowski,kodak
Abd small I
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EMRkkk9huskynm2012
AP 96.6% MI 1.3 TIS 0.2
Lt Kidney
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IntraPet Imaging RBIILLC
kwiatkowski,kodak
Abd small I
12-05-2022 09:46:23 AM Admin
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AP 96.6% MI 1.3 TIS 0.2
Lt adr
1 Dist 2.81 cm
2 Dist 0.78 cm
3 Dist 0.71 cm
IntraPet Imaging RBIILLC
kwiatkowski,kodak
Adult ABD
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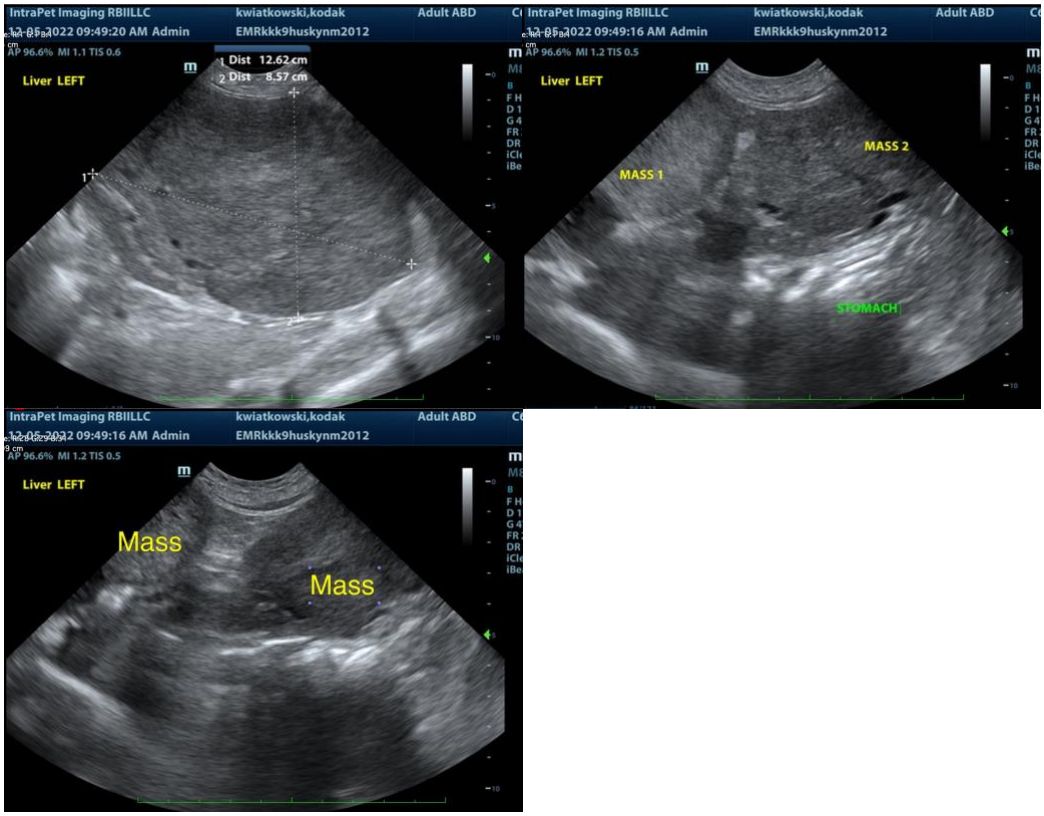
AP 96.6% MI 1.0 TIS 0.6
Liver RT
1 Dist 9.42 cm
GB



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
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