

**DATE PRESENTING CLINICAL SIGNS**

12/28/21

History: abdomen appears distended last 2 weeks. Comments: abdomen is slightly distended, no masses palpated. Quick scan with ultrasound reveals abdominal effusion; obtained sample of fluid - serosanguinous, minimal cellularity.

PATIENT

Storm Groat

SPECIES

Canine

Lab Results: elevated ALT, otherwise NSF. Attached separately.
 Date of Previous IntraPet Ultrasound: No previous IntraPet scans.
 Sedation: Not required to complete full diagnostic ultrasound.
 Stat Report: Not requested.

BREED

Cane Corso

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**SEX**

Spayed Female

Urinary System

The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2 cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

AGE

9/30/11

The left kidney has a normal shape and size (7.78 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.

WEIGHT

78 Lbs.

The right kidney has a normal shape and size (7.5 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.

INTERPRETED BY

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

Adrenal Glands

The left adrenal gland is normal in size measuring 0.68 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

Rachel Brillhart RDMS

The right adrenal gland is normal in size measuring 0.63 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. The appearance is somewhat irregular, in that there is a 0.7 cm hyperechoic focal nodule towards the cranial aspect of the left adrenal. This does not significantly deform the adrenal gland but it consistent with a nodule.

HOSPITAL NAME

Festival VC

Spleen

The spleen is subjectively normal in size The spleen echotexture is heterogenous and mottled, the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. There is a hypoechoic solid mass effect within the parenchyma, measuring 2.22 cm x 1.82 cm.

REFERRING VET

Dr. Beron

Liver

The liver is subjectively normal in size, and 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 discreet solid hypoechoic nodules/masses throughout the hepatic parenchyma, the largest measuring 4.51 cm x 2.71 cm, another measures 3.36 cm x 3.32 cm. Additionally, there is a cyst visualized, measuring 3.55 cm cx 3.98 cm.

INVOICE

13203

The gall bladder 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 and common bile ducts are normal/not visible.

Gastrointestinal

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7 cm 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. The duodenum measured as normal (between 0.3-0.5 cm in wall thickness) and the jejunum measured as normal (between 0.2-0.47 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/region of 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

There is no free fluid. Occasional prominent mesenteric lymph nodes are visualized, particularly in the cranial abdomen. The omentum is of normal echogenicity.

Other

A brief view of the heart was submitted. No pericardial effusion was seen.

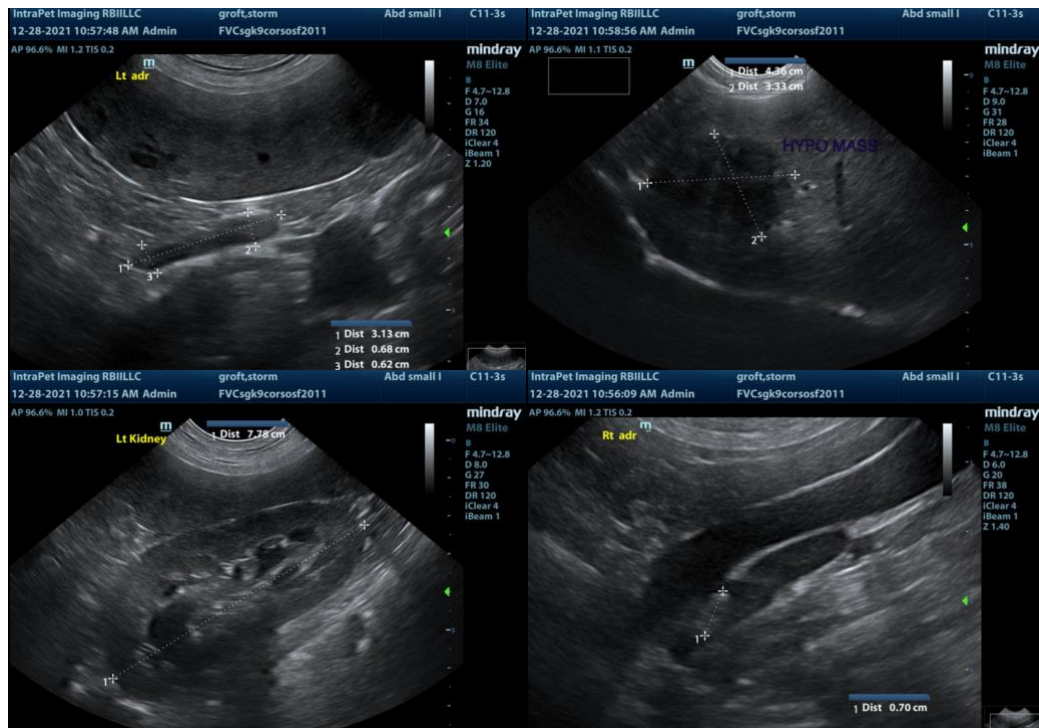
ULTRASONOGRAPHIC FINDINGS

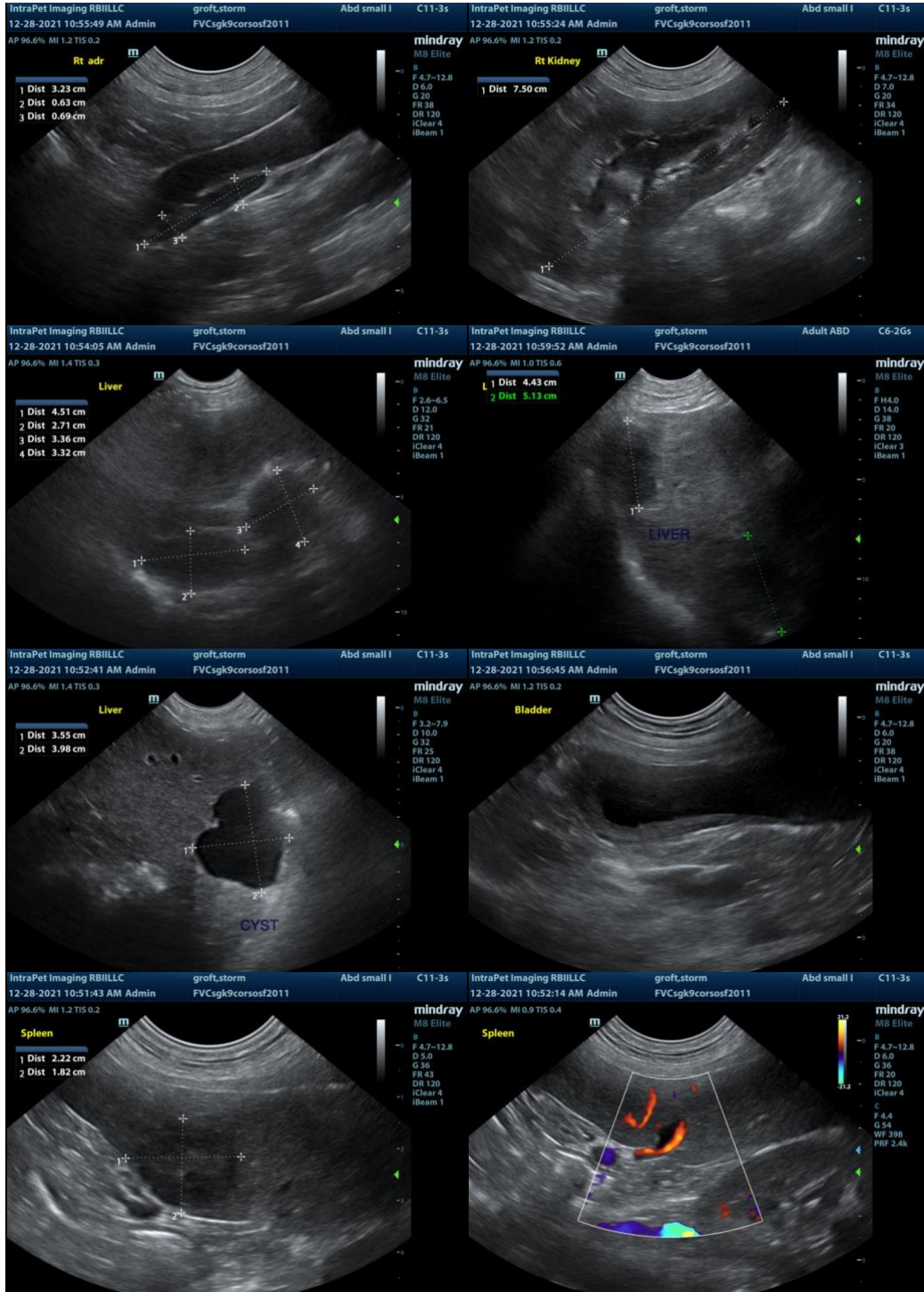
- Large hypoechoic splenic nodule/mass. There is a non-cavitated, hypoechoic splenic nodule/mass visualized. Differentials include lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive diagnosis.
- Heterogenous liver with numerous, large hypoechoic nodules/masses. 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. There is concern for a neoplastic process based on the similar appearing nodules in both the liver and spleen.
- Small hyperechoic nodule in the right adrenal gland. Right adrenomegaly could be consistent with neoplasia (e.g., adenoma, carcinoma, pheochromocytoma), hyperplasia, inflammation, other.
- Prominent mesenteric lymph nodes. The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There are numerous distinct hypoechoic nodules/masses within the liver and additionally, there is a focal nodule/mass lesion within the spleen I recommend a fine needle aspirate and three-view thoracic radiographs. These lesions could be benign but the number and similar appearance is concerning for an underlying neoplastic process.

Additionally, there is a small hyperechoic nodule in the right adrenal gland. This has a relatively benign appearance, but some adrenal lesions can be very aggressive. If signs of cushings are present, you could consider adrenal function testing. Additionally, you could consider a contrast CT scan or surgical removal. Mt inclination would be to recommend continued monitoring with ultrasound (recheck ultrasound of this area in 1-2 months).





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.

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