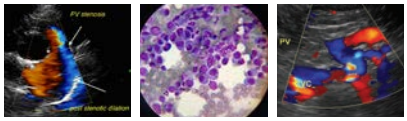
IMAGING PERFORMED BY

IntraPet.com



SonoPath
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DATE

2/3/23

PATIENT

Buddy Trout

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

1/2/21

WEIGHT

12.5 Pounds

INTERPRETED BY

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

HOSPITAL NAME

Cat Sense Feline Hospital

REFERRING VET

Dr. Sinclair

INVOICE

44733

PRESENTING CLINICAL SIGNS

Buddy has been having increased vomiting and a decreased appetite. He is FIV positive. Bloodwork showed a mildly increased calcium level. The vomiting is frequently right after eating but he doesn't seem to be eating too fast. He has been tried on miratax and cerenia and they have helped but his appetite decreases when he is not on them.

Current Medications: Cerenia 6mg sid, Mirataz
Lab Results: Ca=12.3mg/dL (8.2-11.2)
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 has a somewhat irregular shape but is normal in size (4.8 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is significant perinephric inflammation and a small amount of effusion. In the caudal aspect of the kidney there are two hypoechoic nodules measuring 1.3 cm and 1.49 cm, which could be renal nodules or adjacent mass lesions. Renal vasculature is normal.

The right kidney is large and irregular (5.38 cm). There is a large mass effect associated with the kidney, which is heterogeneous, and there is very little typical architecture. A renal pelvis can be identified, which appears dilated at 0.50 cm.

Adrenal Glands

The region of left adrenal (Cranial to left renal artery) is unremarkable but the adrenal is not distinctly visualized. No evidence of a mass effect is visualized.

The region of the right adrenal (between right cranial kidney and vena cava) is unremarkable, but the adrenal is not distinctly visualized. No evidence of a mass effect is visualized.

Spleen

The spleen is normal in size (1.3 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 subjectively normal in size with smooth peripheral margins. The parenchyma is hyperechoic and homogenous in echotexture. The visible portions of the vasculature and biliary tract appear normal. In the cranial aspect of the liver adjacent to the diaphragm, there is a mixed echogenic mass measuring 3.35 cm x 1.68 cm, which runs vertically along the diaphragm. Ventrally, there is a 2nd hypoechoic mass effect measuring 2.38 cm x 1.78 cm. Adjacent to these lesions, there are two hypoechoic nodules measuring 1.21 cm and 1.22 cm, which appear either adjacent to these lesions just under the diaphragm, or in the caudal aspect of the thoracic cavity.

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 <0.36cm 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. The duodenum measured as normal (between 0.13-0.38cm in wall thickness) and the jejunum measured as normal (between 0.15-0.36cm.) 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 area 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 free fluid noted. There is a very large, irregular, hypoechoic mass effect in the caudal abdomen measuring >10.27 cm x 5.45 cm. The mass has irregular margins and is likely associated with the root of the mesentery or the omentum. The omentum is diffusely hyperechoic.

Other

The right auricle and pericardium were visualized and were unremarkable. No obvious pathology is visualized. If cardiac function evaluation is desired a full echocardiogram is warranted. There are two irregular hypoechoic lesions that appear adhered to the diaphragm in the abdominal cavity. There is questionable invasion into the diaphragm with hypoechoic nodules that are suspected to be in the caudal thorax. No evidence of pleural effusion is visualized, but 3-view thoracic radiographs are recommended.

PRIMARY FINDINGS

- Large, irregular, poorly defined, hypoechoic caudal abdominal mass – This mass does not appear to be directly associated with any abdominal structures. This likely represent a large omental mass, lymphoid tissue, etc.

- Two hypoechoic, irregular mass effects visualized between the liver and the diaphragm – These lesions could be originating on the diaphragm or the liver, and are highly concerning for neoplastic lesions, possibly a sarcoma.

- Suspected hypoechoic nodules in the caudal thorax – There are hypoechoic nodules visualized underneath the ribcage in the region of the cranial abdominal masses (diaphragmatic masses). I suspect this represents either metastatic lesions or direct invasion through the diaphragm.

- Irregular mixed echogenic right renal mass – Most consistent with a neoplastic lesion (carcinoma, sarcoma, etc.), and very likely to be associated with the other abdominal mass lesions.

- Hypoechoic nodules associated with the left kidney – These are most consistent with renal nodules, likely metastatic lesions, adherence/adjacent lymph node/mass lesions are also possible.

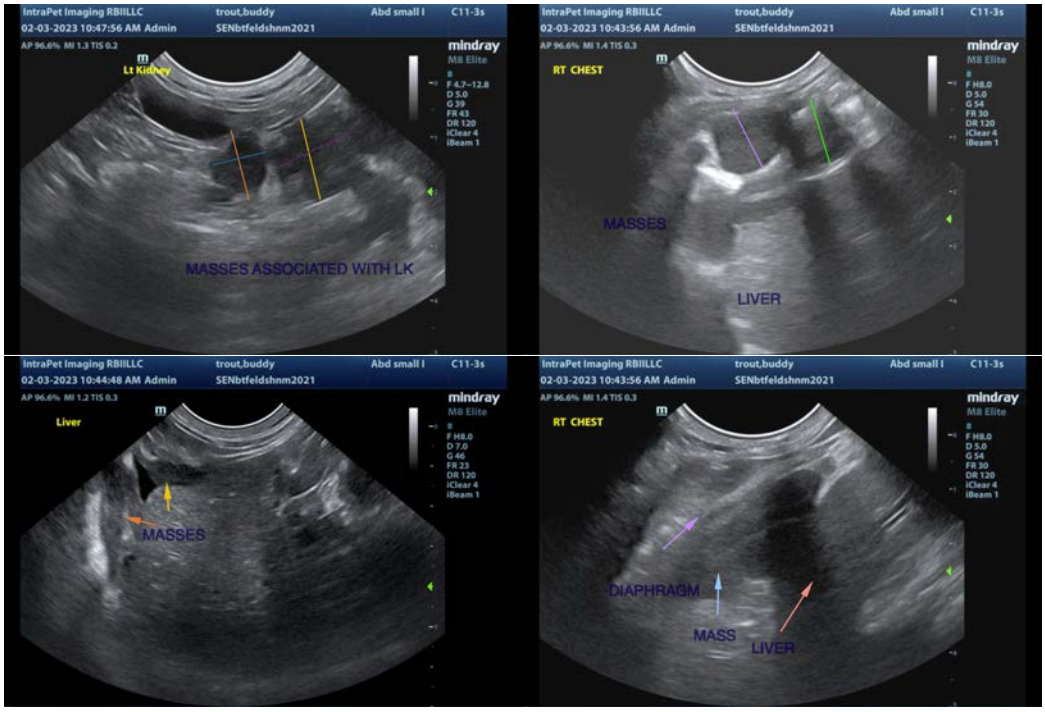
- Small to moderate volume free abdominal fluid

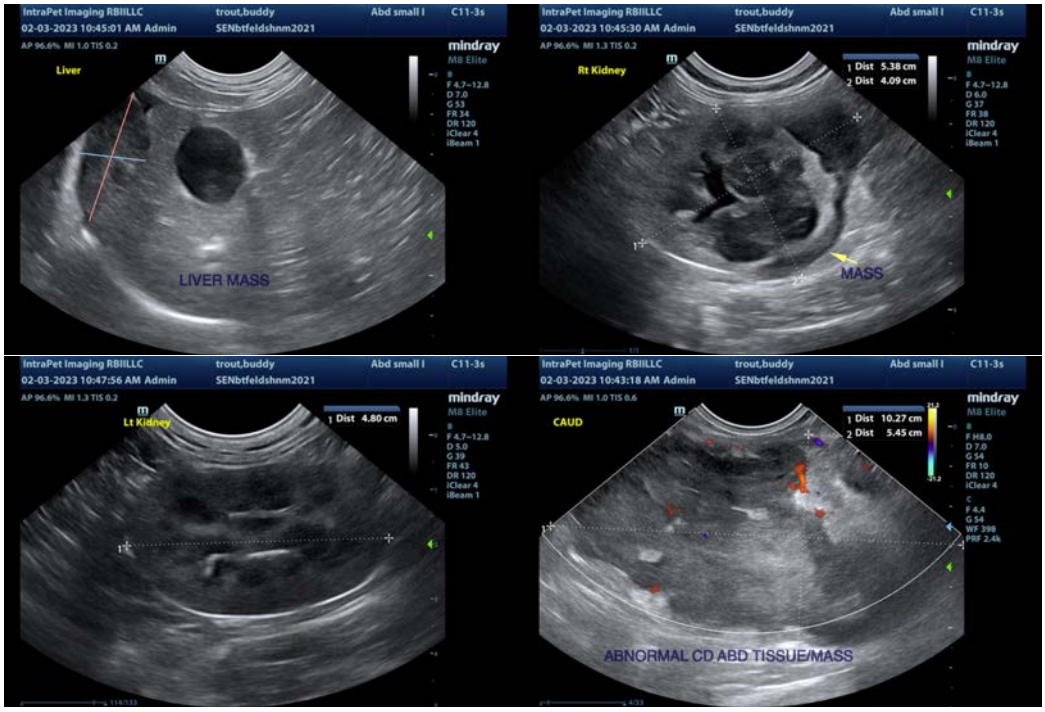
SECONDARY FINDINGS

- 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.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is a very large, ill-defined hypoechoic mass effect in the caudal abdomen, which appears associated with the root of the mesentery or the omentum. Additionally, there are mass lesions associated with the diaphragm between the liver and the diaphragm and both kidneys. There is the possibility that one of the diaphragmatic mass lesions is invading through the diaphragm, as there are questionable hypoechoic thoracic masses as well. Based on this presentation, I would most strongly suspect a metastatic sarcoma. A fine needle aspirate could be considered of the mid abdominal mass. Additionally, the renal mass would be relatively easy to reach. Based on the presentation, this is not a surgical lesion, so if a diagnosis can be obtained, consider consultation with a veterinary oncologist regarding treatment options. Based on this presentation, the prognosis appears poor to grave.





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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