

**DATE PRESENTING CLINICAL SIGNS**

10/7/21 History: colonic adenocarcinoma, Fluid in abdomen.

PATIENT Current Medications: Gabapentin as needed.

Lab Results: modified transudate.

Nori Davis Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not needed.

Stat Report: Not requested/declined.

SPECIES

Feline

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**BREED****Urinary System**

The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2.0 cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

DSH

SEX

Spayed Female

The left kidney has a normal shape and size (2.5 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.

AGE

2003

The right kidney has a normal shape and size (3.45 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

9.08 Pounds

Adrenal Glands

The left adrenal gland is normal in size measuring 0.5 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.

INTERPRETED BY

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The right adrenal gland is normal in size measuring 0.59 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

Animal Hospital at
South Gate

Spleen

The spleen is subjectively normal in size The spleen echotexture is heterogenous and mottled, the splenic capsule is irregular. The blood flow through the hilus and splenic parenchyma appears normal. The splenic margins are irregular with at least two hyperechoic ill-defined irregular nodules, measuring 1.03 cm and 1.31 cm. These mass effects deviate the capsule.

REFERRING VET

Dr. Alexander

Liver

The liver is irregular, large and heterogenous. There is a large mixed echogenicity mass effect in the caudal portion of the liver, measuring 3.83 cm x 3.73 cm. Additionally, there is a smaller hyperechoic peripheral mass effect on the right side of the liver, measuring 1.1 cm x 0.91 cm and a small cystic structure on the periphery measuring 0.91 cm. 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.

INVOICE

13619

Gastrointestinal

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.36 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. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibits somewhat irregular focal wall thickening with fecal material shadowing distally, this could be consistent with a previous surgical site or recurrence of the colonic mass.

Pancreas

The 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

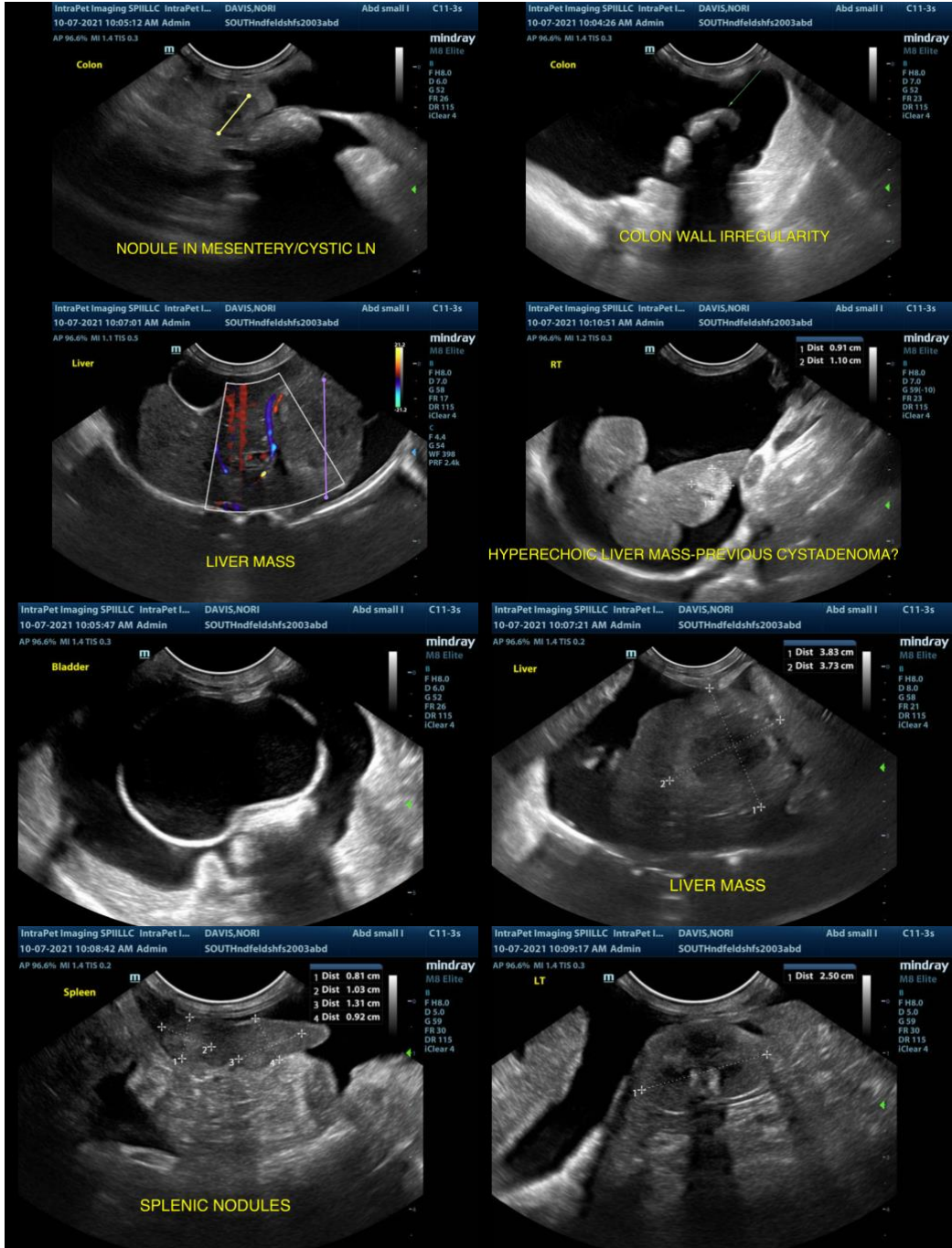
A large volume of anechoic free fluid noted. There is a hypoechoic slightly cystic structure measuring 1.17 cm adjacent to the colon consistent with either a colonic lymph node or omental metastasis. The omentum is generally of increased irregular echogenicity with the suspicion of omental nodules.

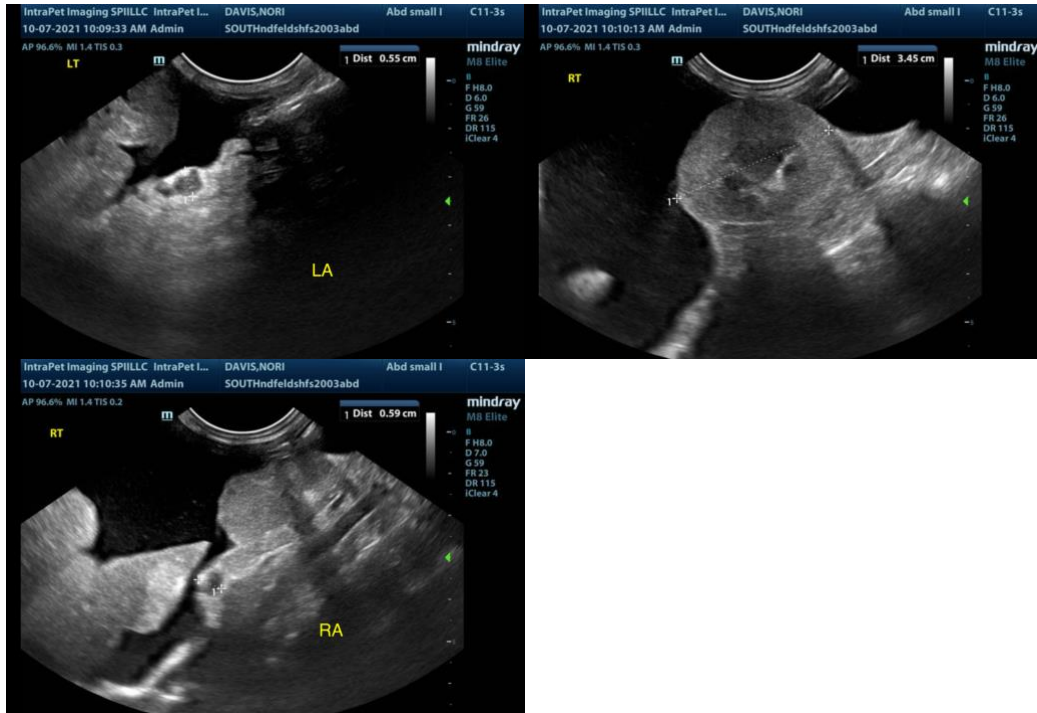
ULTRASONOGRAPHIC FINDINGS

- Large heterogenous liver with a large mass effect in addition to two smaller mass effects- Hepatic changes are non-specific and could be consistent with inflammation/infection (cholangiohepatitis), infiltrative neoplasia, lipidosis or other hepatopathy. These could represent metastatic lesions from the colonic adenocarcinoma or could be primary hepatic masses. A cystic lesion was observed 4/8/21 on CT scan which I suspect is one of the smaller lesions described, possibly consistent with the cyst adenoma.
- Mottled irregular spleen with hyperechoic nodules- These lesions are suspicious for metastatic lesions, consider a fine needle aspirate of the spleen.
- Focal thickening and irregularity of the colonic wall- This could be consistent with the previous surgical site or recurrence of the colonic adenocarcinoma.
- Hyperechoic irregular/nodular omentum with a hypoechoic nodule/lymph node- These findings are concerning for carcinomatosis/metastasis or reactive lymph nodes.
- Large volume free abdominal fluid- This is concerning for a neoplastic effusion, I recommend fluid analysis and cytology.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There are numerous masses within the abdominal cavity involving the spleen and liver. My strongest suspicion is that these represent metastatic lesions from the primary colonic adenocarcinoma reported. Additionally, there could be new neoplastic lesions or benign changes, but this seems unlikely. I recommend fluid analysis and cytology of the abdominal fluid and a fine needle aspirate of the spleen and liver. Based on the ultrasound appearance, I suspect surgery is unlikely to be helpful. Consider consultation with a veterinarian oncologist. I recommend 3 view thoracic radiographs.





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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