

**DATE PRESENTING CLINICAL SIGNS**

3/24/22 Returned to rescue, general exam no concerns, lab work showed elevated ALT.

PATIENT Lab Results: See attached.

Muse So Many Whiskers

Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Feline

Urinary System

The urinary bladder is well filled. The wall is smooth and regular. No abnormalities are present with the trigone or proximal urethra, and there is no evidence of sediment, cystoliths, polyps or a mass.

BREED

DSH

The left kidney is within normal limits in size for the patient's weight (3.74 cm). The capsule is smooth. Its overall architecture, including the definition of the cortico-medullary junction, are preserved. Accumulation of fat is noted in the pelvis. There are no signs of nephroliths or pyelectasia. The surrounding mesentery is not hyperechoic. Blood flow is excellent.

SEX

Spayed Female

The right kidney is within normal limits in size for the patient's weight (3.88 cm). The capsule is smooth. Its overall architecture, including the definition of the cortico-medullary junction, are preserved. There are no signs of nephroliths or pyelectasia. The surrounding mesentery is not hyperechoic. Blood flow is excellent

AGE

8/27/18

WEIGHT

8.1 Pounds

Adrenal Glands

The left adrenal gland measures 0.34 cm. No abnormalities are noted in the gland's shape, overall architecture, echogenicity or echotexture. The phrenico-abdominal vein and surrounding vasculature and mesentery are unremarkable.

INTERPRETED BY

Lisa Carioto, DVM,
DVSc, Diplomate
ACVIM

The right adrenal gland measures 0.28 cm. No abnormalities are noted in the gland's shape, overall architecture, echogenicity or echotexture. The phrenico-abdominal vein and surrounding vasculature and mesentery are unremarkable.

IMAGING PERFORMED BY

Stephanie Pearce
RDMS, RVT

Spleen

The spleen is within normal limits in size (8.45 mm), architecture, echotexture, and echogenicity. The capsule is smooth. No abnormalities are observed with its vasculature, i.e. congestion and thrombi are not identified.

HOSPITAL NAME

AC of Southgate

Liver

It is hard to tell from ultrasound, but subjectively, the liver appears enlarged. There are two echogenicities to the liver. A liver lobe surrounding the gallbladder is diffusely hyperechoic, albeit homogeneous. The portion of the liver medial to the stomach is hypoechoic. This hypoechoic portion resembles what is considered more normal in echogenicity. However, the latter lobe is rounded, yielding a mass effect, that has a subtle "lacey" appearance and is vascularized. This rounded lobe or mass effect is very well circumscribed and measures 4.67 cm in diameter x 4.50 cm in length.

REFERRING VET

Dr. Alexander

The hepatic lymph node is hypoechoic and measures 4.84 mm x 5.61 mm. The surrounding mesentery is hyperechoic.

INVOICE

36465

The gall bladder wall appears to be within normal limits in thickness and echogenicity. There is no evidence of echogenic material (sludge) within the GB or edema surrounding it. Tortuous and dilated cystic and common bile ducts are not present. No abnormalities are observed with the duodenal papilla.

Gastrointestinal

The gastric wall and pylorus are normal in thickness. There is no loss of definition of the normal architecture of the wall layers. No obvious abnormalities are observed with its peristalsis.

The small intestinal wall thickness is within normal limits and there is no evidence of dilation. Although the definition of the wall layers is preserved, mucosal fogging and stippling are present. These findings are not specific, but may be consistent with inflammation in some patients. The ileo-cecal-colic junction and the surrounding mesentery are unremarkable. The colonic wall is not thickened and mural detail is preserved. There are no obvious signs of a mass, infiltrative disease, foreign body, or an obstruction.

Pancreas

No overt abnormalities are observed with regard to the left or right limbs' architecture, echogenicity or echotexture. There is no evidence of hyperechogenicity of the surrounding mesenteric fat.

Other

The majority of the mesenteric lymph nodes are within normal limits in size, echogenicity, echotexture, and architecture. One mesenteric lymph node is very mildly "plump" and enlarged at 5.88 mm, but is otherwise within normal limits.

Abdominal effusion is not visualized.

ULTRASONOGRAPHIC FINDINGS

- Although Muse is quite young to develop a mass, even if benign, differential diagnoses for the mass effect in the liver include, a hepatocellular adenoma, hemangioma, leiomyoma, and a possible bile duct adenoma. A malignant tumour is much less likely given her age, but also the appearance of the mass.
- The diffuse hyperechogenicity and possible hepatomegaly may be due to cholangitis/cholangiohepatitis.
- Underlying inflammatory bowel disease cannot be excluded based on the fogging and stippling of the mucosa of multiple loops of bowel.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

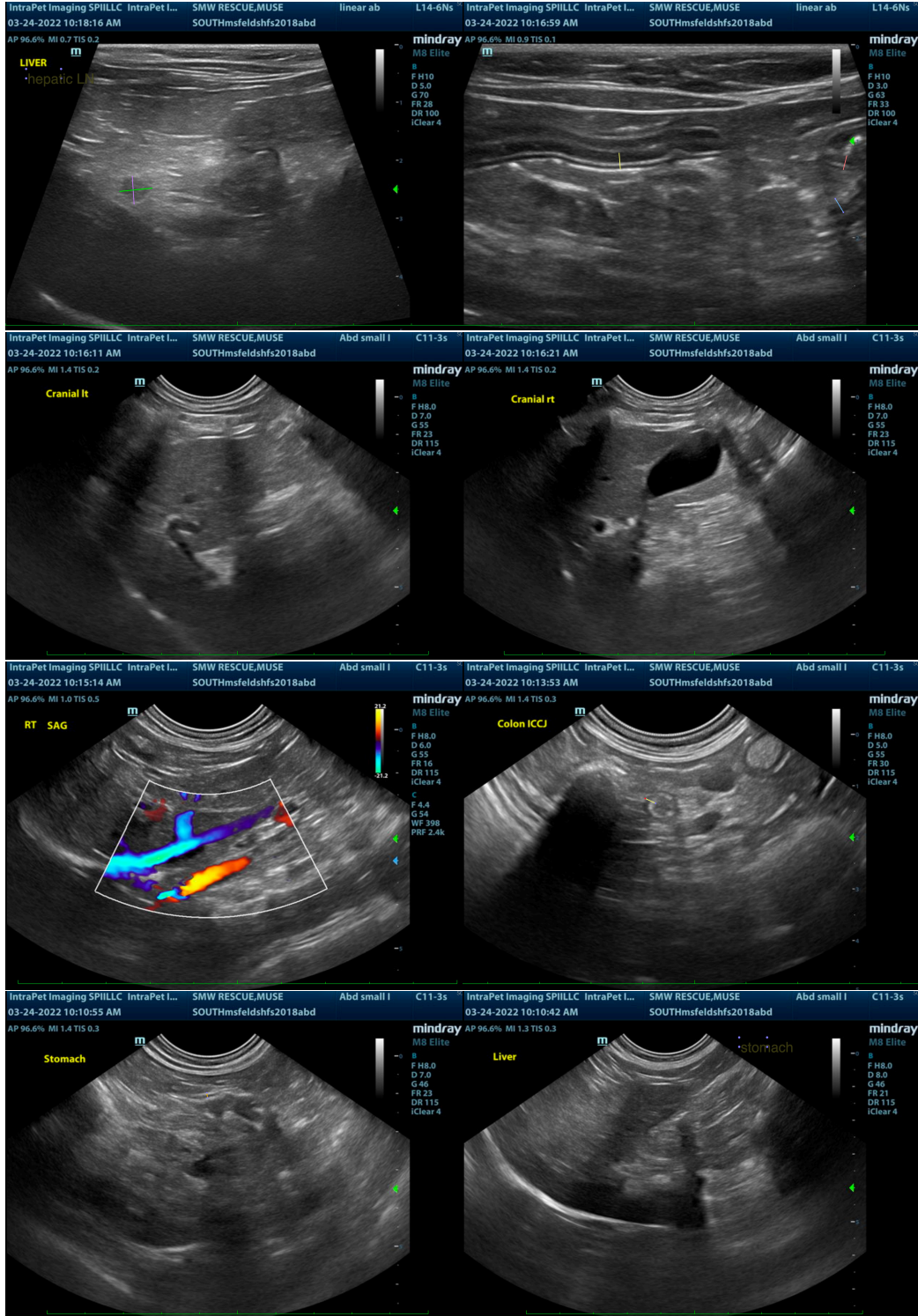
If possible, it would be ideal to find out why Muse was relinquished back to the shelter, as any clinical signs may help determine whether she is suffering from IBD and/or cholangitis/cholangiohepatitis.

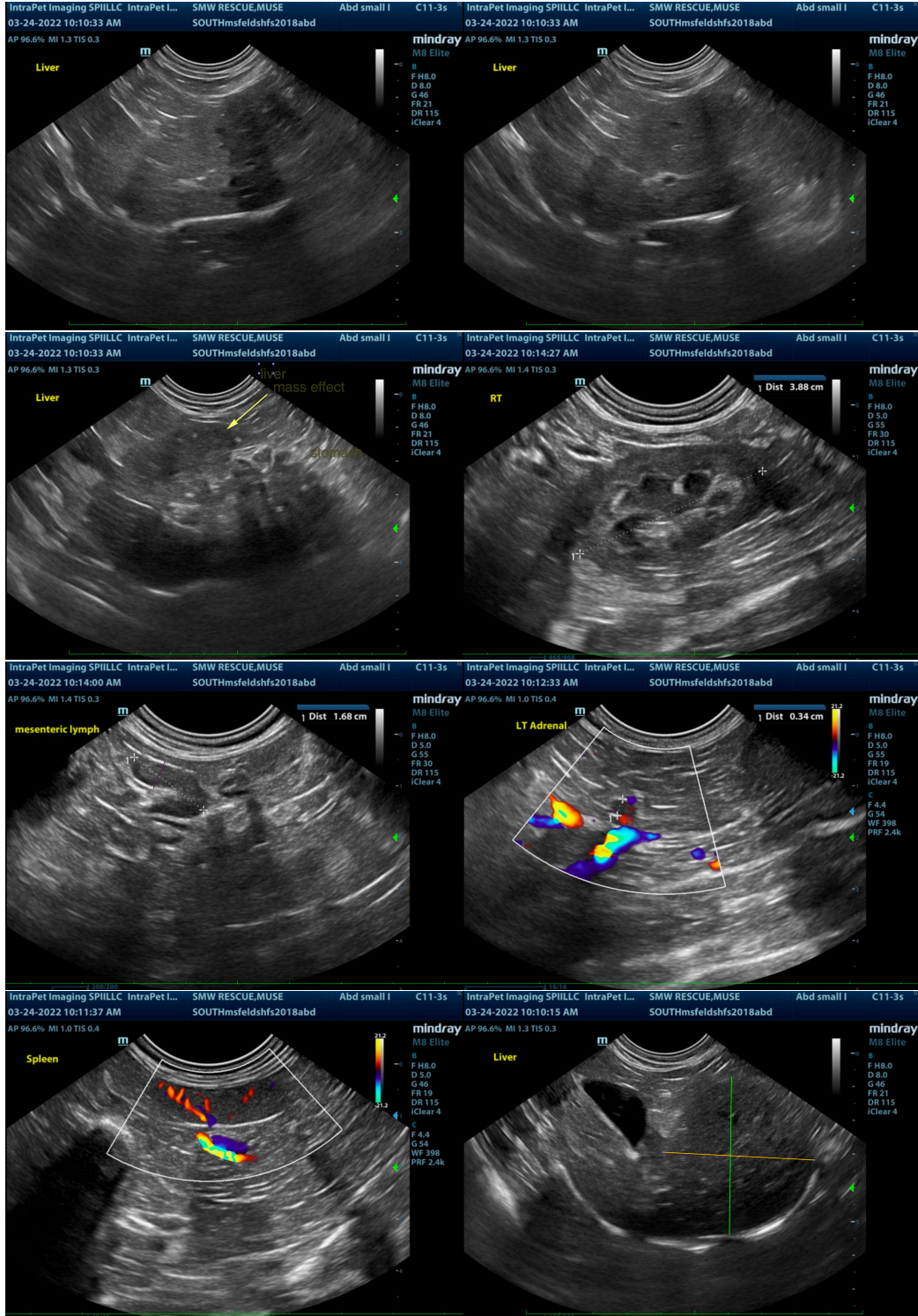
A hypoallergenic, hydrolyzed diet is suggested.

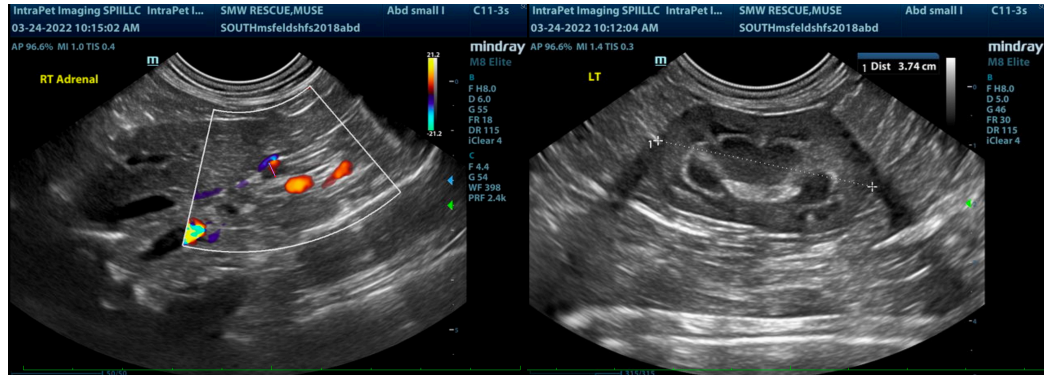
She should also be dewormed with a broad spectrum dewormer, such as fenbendazole. Treatment for 3 days and then repeated 3 weeks later is suggested. These treatments should not be performed simultaneously, i.e. they should be separated by a couple of weeks.

A reevaluation of the hepatic enzyme activities, including a GGT, is recommended 4 weeks after having dewormed her and having changed her diet.

Depending on history and response to the diet trial and dewormer, empirical therapy with antibiotics to treat a possible secondary bacterial cholangitis/cholangiohepatitis may be considered. It should be noted that a component of the elevated ALT may be due to inflammatory bowel disease, in addition to the hepatic abnormalities.







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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