

**DATE**

7/5/22

PRESENTING CLINICAL SIGNS

History: Not eating, lethargic, weight loss. Straining to have bowel movement. Left anal sac mass.

PATIENT

Luke Stiemly

Current Medications: None listed.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: STAT Requested.

SPECIES

Canine

Imaging Performed By: Rachel Brillhart, RDMS.

BREED

Mixed Breed

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The urinary bladder is adequately distended with anechoic contents. The wall is smooth and regular, but mildly thickened (1.5 mm). No abnormalities are noted with the trigone or proximal urethra, and there is no evidence of sediment, cystoliths, polyps or a mass.

SEX

Neutered Male

Kidneys**AGE**

12/22/14

The **left** kidney measures 7.24 cm. The capsule is smooth. Its overall architecture, including the definition of the cortico-medullary junction, is preserved. However, the medulla is mildly hyperechoic, causing a slight accentuation of the cortico-medullary junction. There are no signs of nephroliths or pyelectasia. Blood flow is within normal limits. The surrounding mesentery is not hyperechoic.

WEIGHT

67.1 Pounds

The **right** kidney measures 6.00 cm. Its overall architecture, including the definition of the cortico-medullary junction, is preserved. There are no signs of nephroliths or pyelectasia. The surrounding mesentery is not hyperechoic.

INTERPRETED BY

Lisa Carioto, DVM,
DVSc, Diplomate
ACVIM

Aortic bifurcation/trifurcation

No abnormalities observed.

HOSPITAL NAME

AMC of Bel Air

Adrenal Glands

The **left** adrenal gland measures 0.58 cm at the cranial pole, 0.80 cm at the caudal pole and 2.13 cm in length. No abnormalities are noted with the gland's overall architecture, echogenicity or echotexture. The phrenico-abdominal vein and surrounding vasculature and mesentery are unremarkable.

REFERRING VET

Dr. Chaudhry

The **right** adrenal gland measures 0.80 cm at the cranial pole, 0.87 cm at the caudal pole and 2.40 cm in length. No abnormalities are noted with the gland's overall architecture, echogenicity or echotexture. The phrenico-abdominal vein and surrounding vasculature and mesentery are unremarkable.

INVOICE

16484

Spleen

The spleen is within normal limits in size, architecture, and echogenicity. The capsule is smooth. Its echotexture is very mildly mottled. No abnormalities are observed with its vasculature, i.e. congestion and thrombi are not identified.

Liver

There are no obvious signs of hepatomegaly, and its borders are smooth and sharp. The liver's echotexture is mildly heterogenous, with a mildly coarse or granular echotexture. Focal lesions are not observed and no abnormalities are observed with the hepatic vessels.

The gallbladder wall is within normal limits in thickness and echogenicity. A small to moderate amount of echogenic material is present within the GB. The portions of the cystic and/or common bile ducts observed are not dilated or tortuous, i.e. there are no signs of an obstruction.

Gastrointestinal

A large amount of gas in fluid are present within the lumen of the stomach. The gastric wall is within normal limits in thickness and the wall layers are well defined. However, peristalsis is ineffective suggestive of an ileus.

The small intestinal wall thickness, including the duodenum, is within normal limits and the definition of the wall layers is preserved. Abnormally dilated loops of bowel are not observed.

The colonic wall is very mildly thickened, however, mural detail is considered normal.

Pancreas

No abnormalities are observed with the architecture, contours, echogenicity or echotexture of the pancreas. There is no evidence of hyperechogenicity of the surrounding mesentery, i.e., signs of active pancreatitis are not present.

Other

Anal sacs

Left anal sac is severely enlarged, 2.84 cm in diameter, 3.66 cm in length, with a heterogeneous architecture, containing both ill-defined hyper and hypoechoic areas, as well as calcifications and acoustic shadowing. The mass is vascularized.

Right anal sac. Although the right anal sac is smaller in size and more homogeneous compared to the left, its border is mildly irregular and mildly heterogeneous. It measures 0.94 cm in diameter x 1.46 cm in length. Moderately hypoechoic and anechoic regions are present, suggestive of cystic structures. Severe hyperechoic acoustic enhancement of the surrounding tissues is present.

Lymph nodes (LNs)

Two severely enlarged sublumbar LNs with obliteration of normal architecture.

LN #1: Irregular borders, mottled echotexture with hypoechoic areas scattered throughout, and an anechoic region dorsally. It is avascular and measures 4.80 cm in diameter x 7.67 cm in length. The surrounding parenchyma is severely hyperechoic, consistent with acoustic enhancement.

LN #2: Located more deeply in the abdomen compared to sublumbar LN #1. The affected LN not only has irregular borders, but two encapsulated, cystic areas with anechoic contents, as well as ill-defined hypoechoic regions. It measures approximately 5.16 cm at its largest diameter x 7.36 cm in length. The surrounding parenchyma is severely hyperechoic

Abdominal effusion is not visualized.

ULTRASONOGRAPHIC FINDINGS

- **Anal sacs:** The left anal sac is invaded by a mass which contains calcifications. The latter is highly suggestive of an *adenocarcinoma of the anal sac*. The right anal sac is not as severely affected, however, its appearance is also suggestive of early invasion.

- **Lymph nodes (LNs):** Severe lymphadenomegaly with obliteration of the normal architecture of two sublumbar LNs, consistent with *metastases*.
- **Spleen:** Mildly mottled echotexture, suggestive of extramedullary hematopoiesis, reactive hyperplasia or possible hypersplenism. Neoplasia is possible, but considered less likely.
- **Adrenal glands:** Mild bilateral adrenomegaly, suggestive of hyperplasia secondary to stress and chronic illness.
- **Gastrointestinal tract:** Mild colonic thickening, which may be secondary to tenesmus.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The following are suggested/recommended:

Fine needle aspirates of the anal sac mass may be performed to confirm the diagnosis. Fine needle aspiration of the lymph nodes are possible, however there is a possible risk of seeding neoplastic cells in the abdomen.

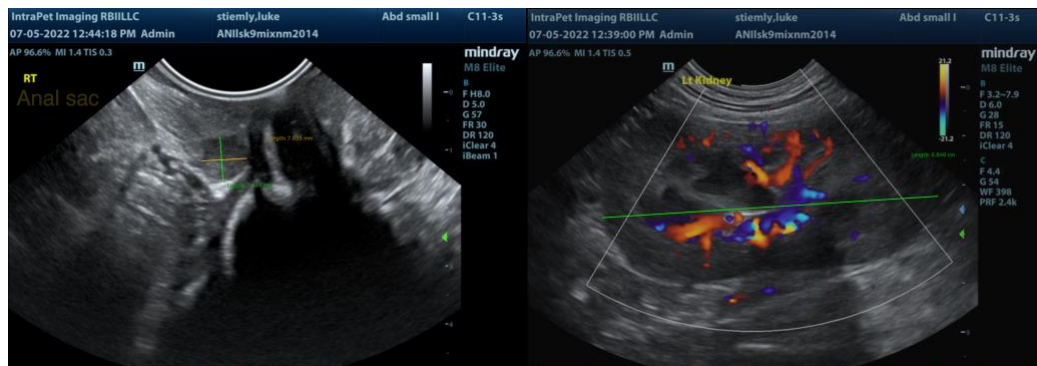
Thoracic radiographs (3 views) to evaluate the sternal lymph nodes.

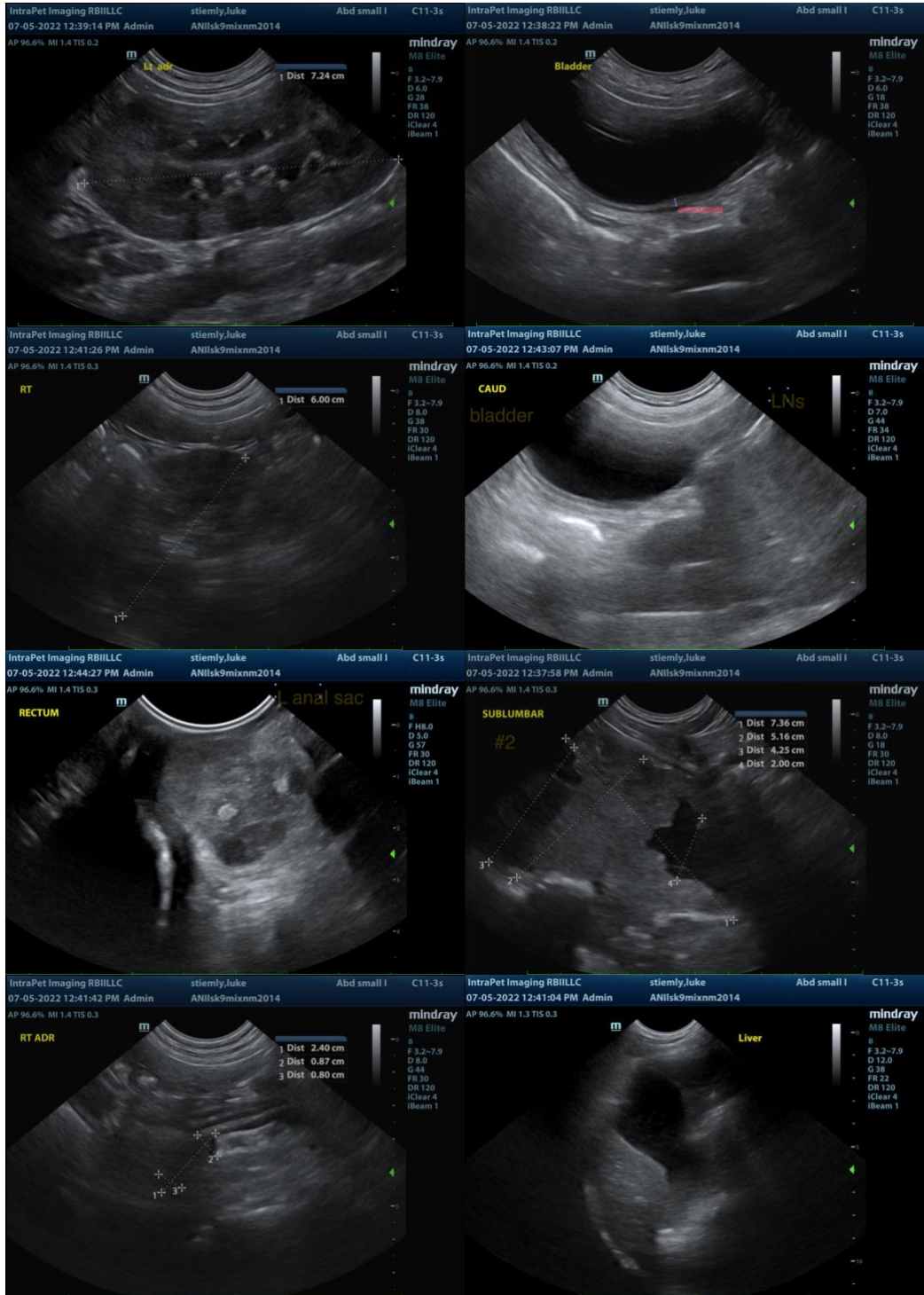
Referral to an oncologist to discuss all treatment protocols available.

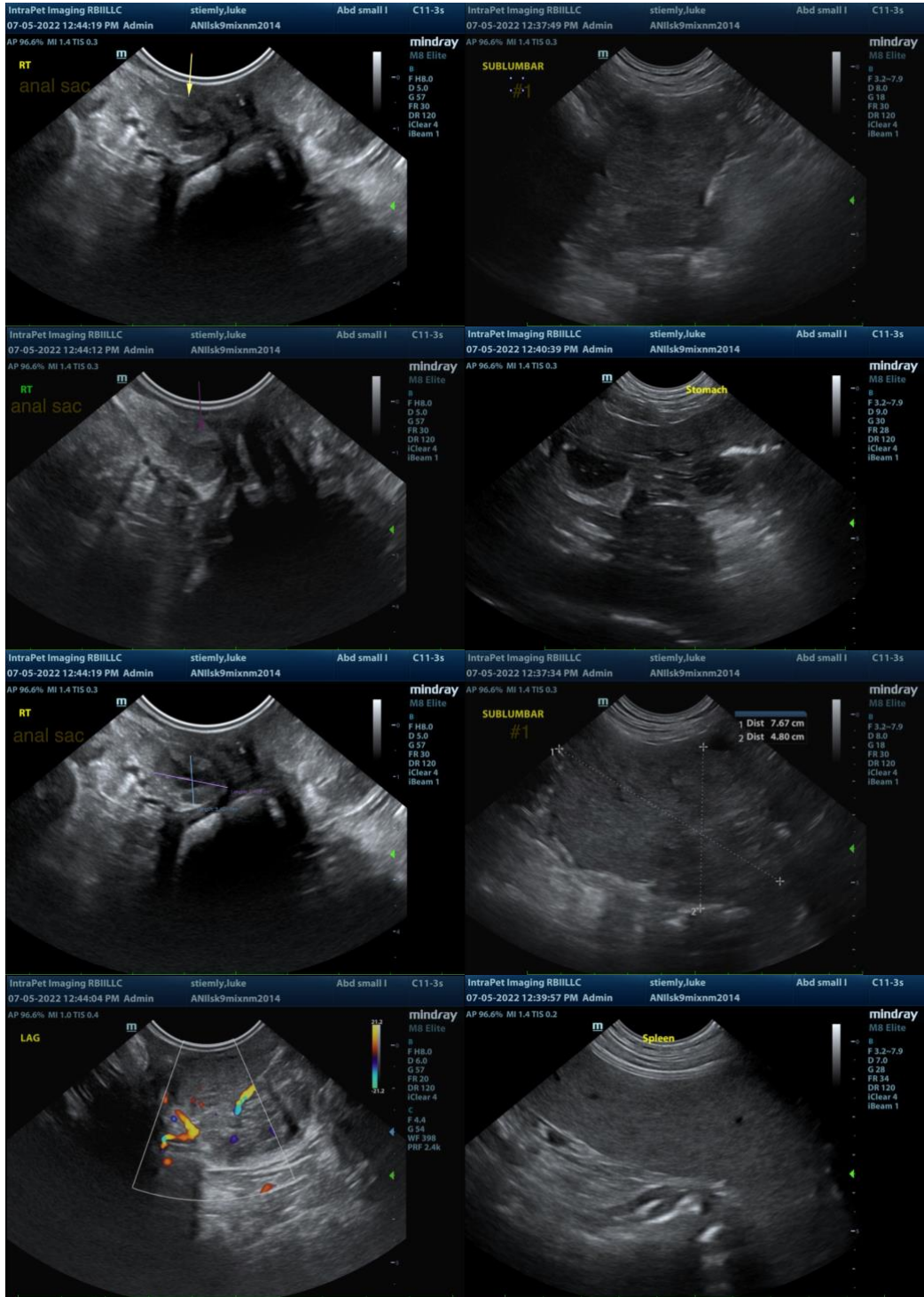
If aggressive chemotherapy will not be pursued, treatment with:

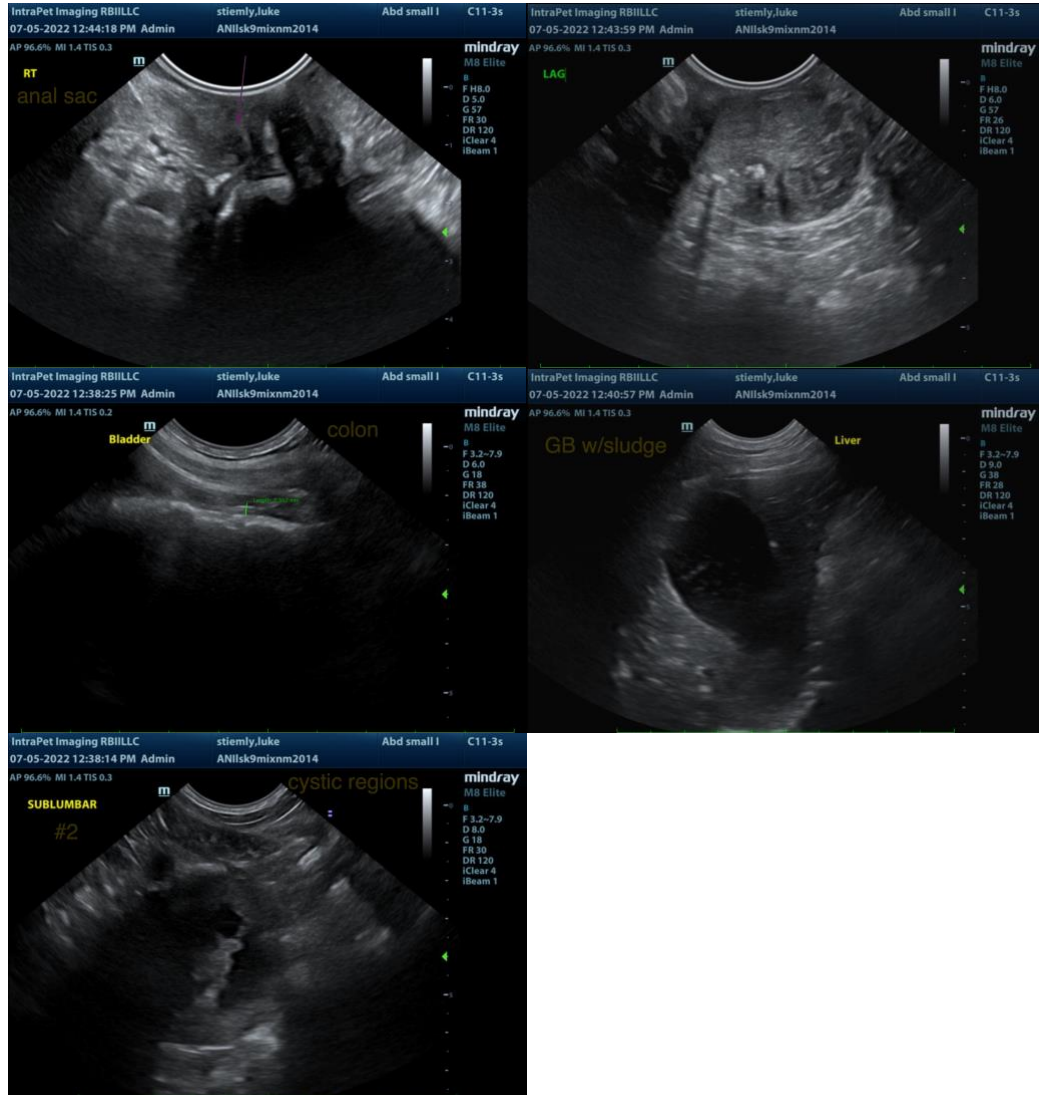
a non-steroidal anti-inflammatory, such as meloxicam or deracoxib, both of which have anti-neoplastic effects, may be prescribed, in addition to gabapentin.
 gabapentin
 toceranib (Palladia®), a tyrosine kinase inhibitor,
 +/- chlorambucil

toceranib (Palladia®) can help slow down the progression of the tumour. It is administered by mouth three days a week, for example, Mondays, Wednesdays, Fridays. Routine blood work, consisting of a CBC and serum biochemical profile, is required to monitor for neutropenia and elevated liver enzyme activities. A stool softener, such as PEG 3350 or psyllium, is suggested based on his current clinical signs of tenesmus. An appetite stimulant may be helpful, however, analgesia should make him feel better.









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.

Lisa Carioto, DVM, DVSc, Diplomate ACVIM

Lisa.Carioto@sonopath.com