**DATE PRESENTING CLINICAL SIGNS**

3/24/22 Acute onset vomiting past 12 hours, no known FB ingestion/dietary indiscretion.

PATIENT Current Medications: Buprenorphine 0.01mg/kg SC at 10AM, Cerenia 1mg/kg IV at 10:30am.
Lab Results: Snap CPL abnormal.

Leo Luhrs Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: STAT Requested.

SPECIES

Canine

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

Cavalier King Charles

The urinary bladder is adequately filled. The wall is smooth and regular. No abnormalities are present with the trigone or proximal urethra, and there is no evidence of cystoliths, polyps or a mass. A trivial amount of sediment is noted free floating within the lumen. The latter is clinically insignificant.

SEX

Neutered Male

The prostate is homogenous and measures 0.90 cm, which is within normal limits for a neutered male.

AGE

5/22/20

The left kidney is within normal limits in size for the patient's weight (4.02 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. Blood flow is considered normal.

WEIGHT

16.6 Pounds

The right kidney is within normal limits in size for the patient's weight (3.72 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.

INTERPRETED BY

Lisa Carioto, DVM,
DVSc, Diplomate
ACVIM

Adrenal Glands

The left adrenal gland measures 0.45 cm at the cranial pole, 0.44 cm at the caudal pole, and 1.96 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. It is mildly "flatter" than the right, but not considered clinically significant.

IMAGING PERFORMED BY

Rachel Brillhart RDMS

The right adrenal gland measures 0.63 cm at the caudal pole, 0.54 cm at the caudal pole, and 1.76 cm in length. The caudal pole is at the high end of normal reference range, and the gland is "plump" compared to the left. This is unlikely to be clinically significant. The measurement of the caudal pole may be due to hyperplasia secondary to stress. No abnormalities are noted with its echogenicity or echotexture. The phrenico-abdominal vein and surrounding vasculature and mesentery are unremarkable.

HOSPITAL NAME

Perry Hall AH

Spleen

The spleen is within normal limits in size, architecture, echotexture, and echogenicity. It is hyperechoic to both the liver and renal cortex. The capsule is smooth. No abnormalities are observed with its vasculature, i.e. congestion and thrombi are not identified.

REFERRING VET

Dr. Baer

Liver

There are no obvious signs of hepatomegaly and its borders are smooth and sharp. The liver's echotexture is homogeneous and it is within normal limits in echogenicity, i.e. it is hypoechoic to the spleen and isoechoic to the kidneys. No abnormalities are observed with the hepatic vessels.

INVOICE

36413

The gall bladder wall appears to be within normal limits in thickness and echogenicity. There is a very small amount of sludge present, which is not clinically significant. The cystic and common bile ducts are not dilated or tortuous.

Gastrointestinal

The lumen of the stomach is filled with both liquid and gas, and an abnormal gas pattern is present in certain regions. Ineffective peristalsis is observed (movement of stomach contents is observed, but not in the proper direction). A rigid, linear foreign body that is not moving, is observed, as well as other foreign material. Edema of the individual wall layers is present, and the surrounding mesentery is moderately hyperechoic.

An abnormal gas pattern is present in the small intestine ventromedial to the spleen. The corrugated loop of bowel is abnormally dilated (1.51 cm) with liquid and gas bubbles and abnormal peristalsis. Multiple dilated loops of bowel are observed in the caudal abdomen, which also have decreased peristalsis. The mesentery surrounding the affected loops of bowel are mildly to moderately hyperechoic.

Pancreas

The left pancreatic limb is hypoechoic and mildly enlarged, which is consistent with edema, while the surrounding mesentery is hyperechoic. These signs are compatible with a diagnosis of active pancreatitis.

The right pancreatic limb is slightly hypoechoic, and the surrounding mesentery is slightly hyperechoic. Therefore, pancreatitis appears to “be brewing”.

Other

There is no evidence of lymphadenomegaly. However, there is a large amount of gas, ingesta and liquid in the intestinal tract, which could affect one’s ability to visualize lymph nodes.

Abdominal effusion is not visualized.

ULTRASONOGRAPHIC FINDINGS

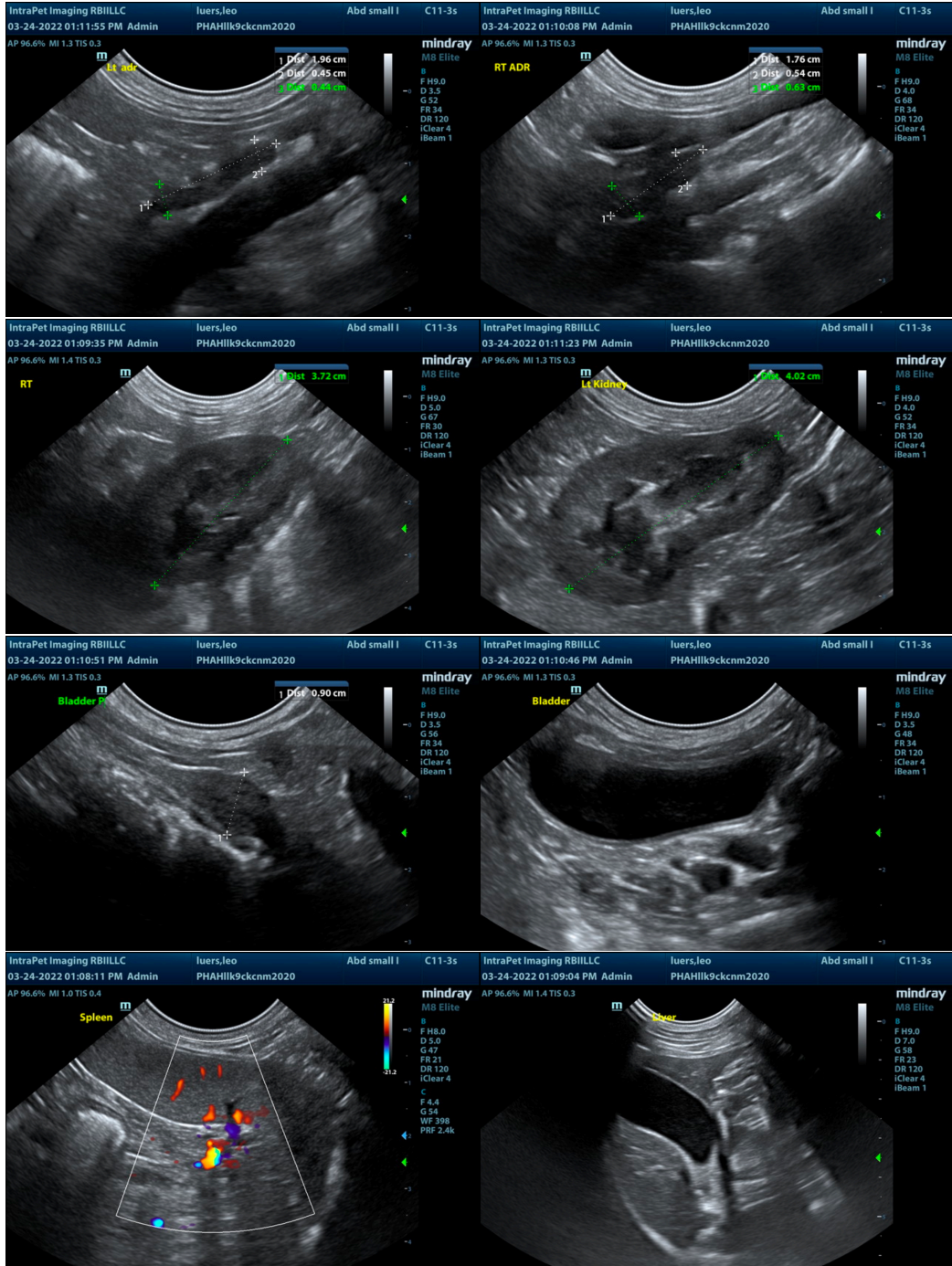
- Linear gastric foreign body with accompanying ileus. Please examine Leo under his tongue for possible foreign body.
- A possible obstructive pattern is visualized in the small intestinal tract, however, evaluation of the radiographs would be beneficial (see below).
- Signs of active pancreatitis are present

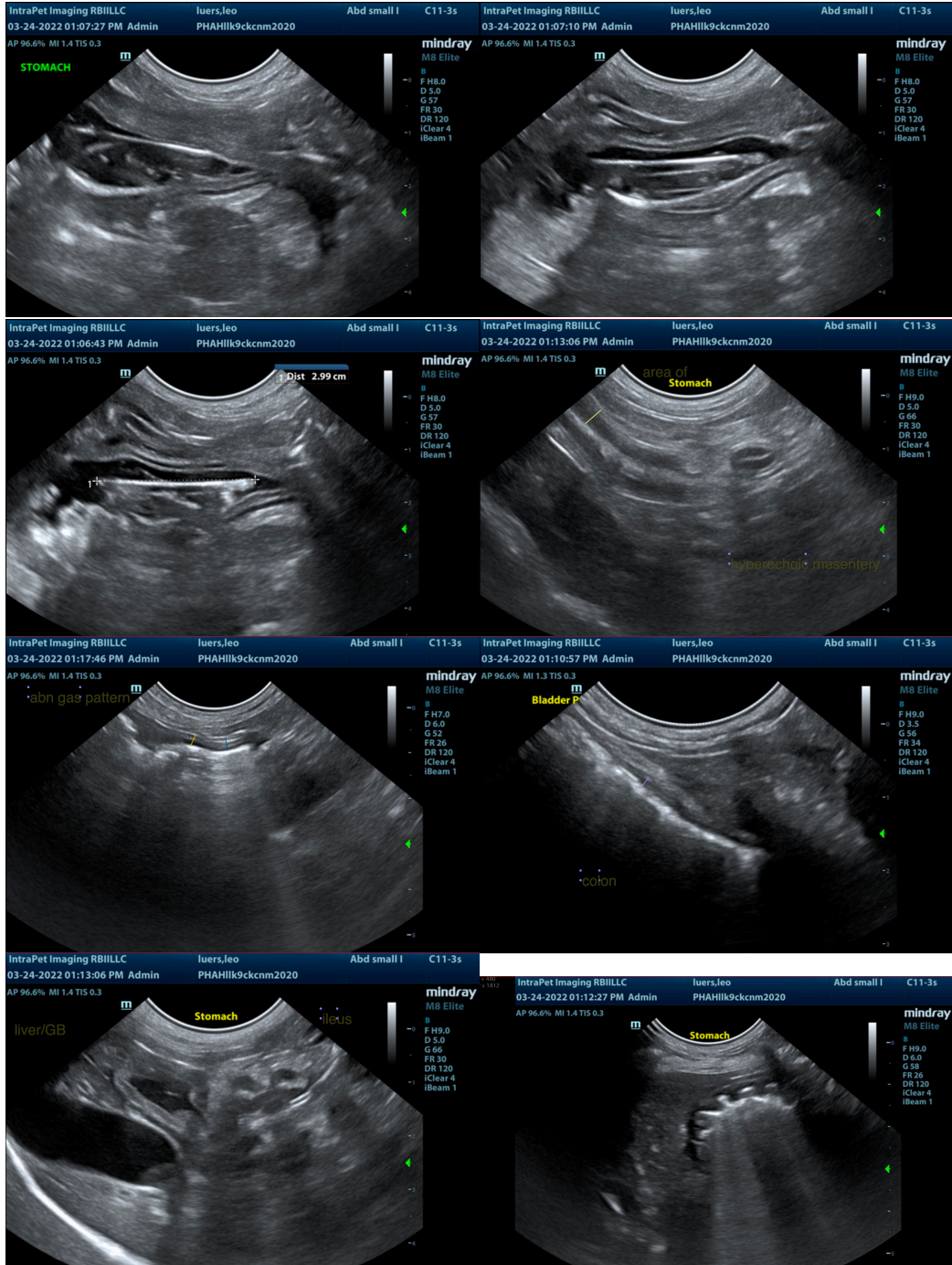
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

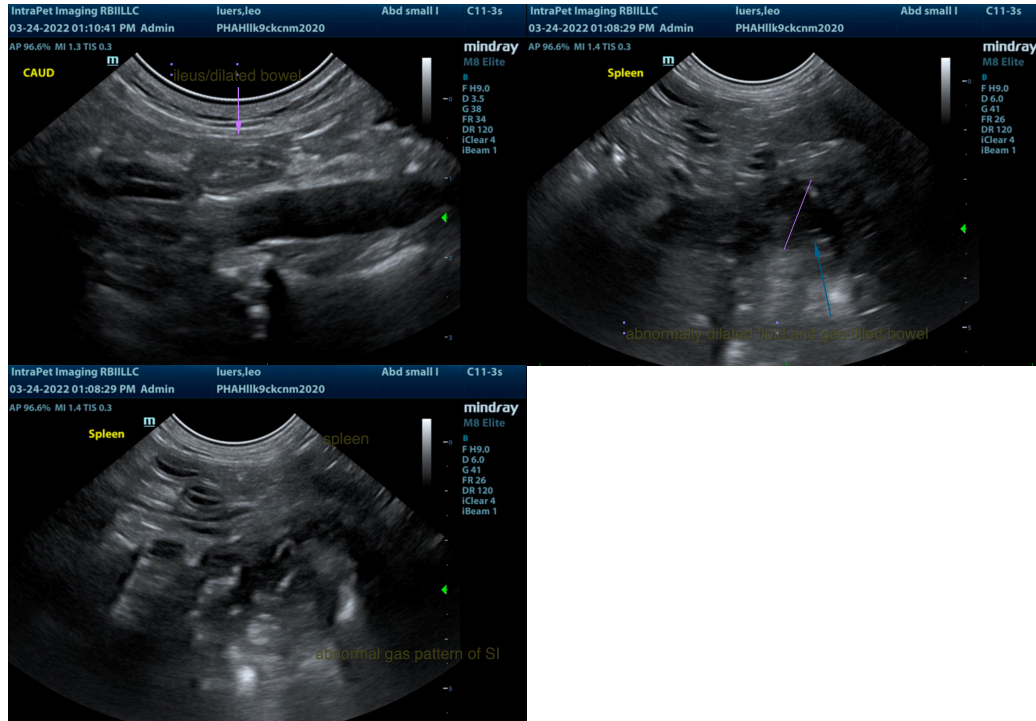
A linear foreign body is present in the stomach, in addition to foreign material, gas and fluid. It is difficult to determine whether the foreign body is fully obstructive at this time. The changes observed to the stomach wall and surrounding mesentery may be due to gastritis secondary to peracute vomiting. Signs of acute pancreatitis of the left limb are present. Furthermore, the right limb of the pancreas is becoming edematous. A gastric ileus is present and certain loops of small intestine are mildly dilated and have decreased peristalsis. Some of the material in the stomach may be grass if Leo ate grass due to nausea. **An evaluation of the radiographs taken earlier today would be helpful and would be evaluated at no charge.*

There are two possible options. If a Leo is bright and alert, and not overtly dehydrated, he may be kept on analgesics, IV fluids, and antiemetics and monitored. Radiographs or an ultrasound can be rechecked in a few hours to see if the abnormal gas pattern has moved/changed. If it hasn’t, endoscopy or exploratory surgery will be required. However, if he is lethargic and depressed, and has continued vomiting despite administration of antiemetics, endoscopy or exploratory surgery is recommended right away.

If possible, please send me the radiographs so I may better assist you.







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 AVIM

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