**DATE**

7/11/22

PRESENTING CLINICAL SIGNS

Weight loss and limping. Was seen a week ago and mass was not noted by me feeling, may be fast growing. At recheck 1.5cm mass in cranial abdomen irregular noted, is still eating.

Current Medications: Currently on Gabapentin 25mg BID PRN.

PATIENT

Gilwell Mulhall

Lab Results: Mini profile- NSF for Onsiar single injection for possible anterior cruciate on right.

Radiographs: Calcified mass noted.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

SPECIES

Feline

Imaging Performed By: Rachel Brillhart, RDMS.

BREED

Domestic Shorthair

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The **urinary bladder** is not fully distended, however, the wall is smooth and regular. Its contents are primarily anechoic. No abnormalities are present with the trigone or proximal urethra. A small to moderate amount of free floating sediment is present, however, there is no evidence of cystoliths, polyps or a mass.

SEX

Spayed female

Kidneys

The **left** kidney measures 3.50 cm (3.80-4.40 cm). The capsule is smooth. Its overall architecture, including the definition of the cortico-medullary junction, is preserved. There are no signs of nephroliths or pyelectasia. Blood flow is within normal limits. The surrounding mesentery is not hyperechoic.

AGE

1/1/12

The **right** kidney measures 3.66 cm (3.80-4.40 cm). The capsule is smooth. Its overall architecture, including the definition of the cortico-medullary junction, is preserved. There are no signs of nephroliths or pyelectasia. Blood flow is within normal limits. The surrounding mesentery is not hyperechoic.

WEIGHT

5.5 lbs

Aortic bifurcation/trifurcation

No abnormalities observed.

INTERPRETED BY

Lisa Carioto, DVM,
DVSc, Diplomate
ACVIM

Adrenal Glands

The adrenal glands are not visualized due to the presence of the abdominal mass.

HOSPITAL NAME

Belvedere VC

Spleen

The spleen is within normal limits in size 7.7 mm (normal = 10 mm), echotexture, and echogenicity. The capsule is smooth. No abnormalities are observed with its vasculature, i.e. congestion and thrombi are not identified.

REFERRING VET

Dr. Molinelli

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. Focal lesions are not observed. The walls of the portal veins are prominent, however, no other abnormalities are observed with the hepatic vessels.

INVOICE

31566

The **gallbladder** (GB) wall is within normal limits in thickness and echogenicity. A small 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

The gastric wall is within normal limits in thickness and the wall layers are well defined. No obvious abnormalities are observed with its peristalsis.

The small intestinal wall thickness is within normal limits and the definition of the wall layers is preserved. However, subjectively, the submucosal layer of the jejunum is more prominent than usual. Abnormally dilated loops of bowel are not observed.

The colonic wall is not thickened and mural detail is considered normal.

There are no obvious signs of a mass, foreign body, infiltrative disease or an obstruction in the gastrointestinal tract.

Pancreas

A mass effect is noted medial to the spleen and left kidney. A small portion of homogeneous pancreatic parenchyma of the left limb is observed, in addition to a heterogeneous mass effect. The two appear to be associated with one another. The surrounding mesentery is hyperechoic. The mass in the left cranial abdomen appears to be an extension of the mass from the right limb of the pancreas, with only a very small portion of normal left limb remaining. (See other, below, regarding right limb).

Other

Mass cranial abdomen

Presence of a very large, heterogeneous mass located in the right cranial quadrant, between the liver and the right kidney, where the pancreas should be located. The mass consists of ill-defined hypoechoic regions, hyperechoic "patches" scattered throughout it, as well as punctate, yet aggregated, hyperechoic foci, which cast acoustic shadows. The latter are consistent with calcifications.

The mass measures 3.50 cm in diameter x 5.77 cm in length. In another view (sagittal), it measures 3.48 cm in diameter x 6.81 cm in length. Although the parenchyma of the mass does not seem well vascularized when evaluated with colour Doppler, blood vessels run through it. The mass also appears to "envelop" or "wrap around" the aorta and caudal vena cava in certain views. The omentum surrounding the mass and organs is severely hyperechoic.

The mass is also observed in the caudal abdomen, where it appears multilobulated and has blood vessels running through it (see image labeled transverse).

Lymph nodes

A hypoechoic, round, structure, 0.58 cm in diameter x 1.00 cm, is noted dorsal to the left kidney. The differential diagnoses for the structure include a lymph node or a metastatic nodule.

Multiple hypoechoic lymph nodes are noted amongst the loops of bowel in the caudal abdomen.

Abdominal effusion

A scant amount of anechoic effusion is visualized in the caudal abdomen amongst loops of jejunum and ventral to the urinary bladder, as well as dorsal to the liver

ULTRASONOGRAPHIC FINDINGS

- **Pancreas/Abdominal mass:** Single, large mass, which appears to be originating from the right limb of the pancreas. The mass occupies the entire cranial abdomen, and a large portion of the caudal abdomen. Presence of calcification of the mass is highly suggestive of a carcinoma or adenocarcinoma.

Carcinomatosis cannot be excluded based on the presence of ascites and a nodule observed dorsal to the left kidney. Although the latter may be a lymph node, a metastatic lesion cannot be excluded.

- **Lymph nodes:** Lymphadenomegaly of multiple lymph nodes in the caudal abdomen. Although they are still relatively small in size and may represent reactive hyperplasia, infiltrative disease is more likely based on the findings observed in the rest of Gilwell's abdomen.
- **Urinary bladder:** The sediment within the lumen is likely clinically insignificant, and represents crystalluria, mucus and other proteins. Findings should be interpreted in conjunction with the results of the urinalysis.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Unfortunately, surgical resection of the mass is not possible.

Ultrasound guided fine needle aspirates of the mass may be performed to obtain a definitive diagnosis. This will help determine prognosis based on the type of neoplasm, and also treatment protocols available.

Note, hemorrhaging may occur with fine needle aspirates if a necrotic region is aspirated, therefore, a 25 g needle is suggested.

Thoracic radiographs (3 views) are suggested to evaluate the sternal lymph nodes/lungs for pulmonary metastases

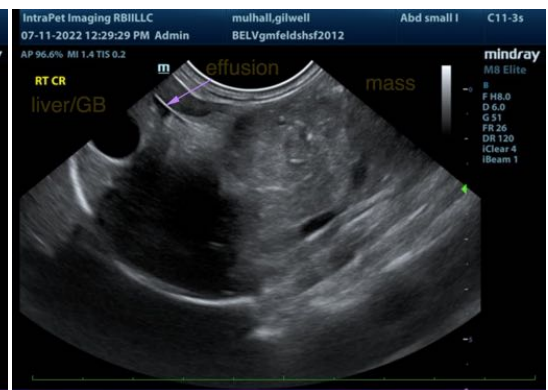
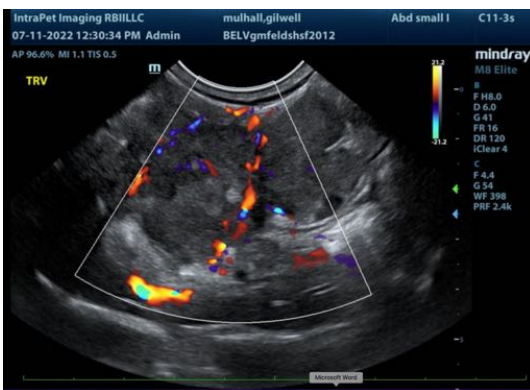
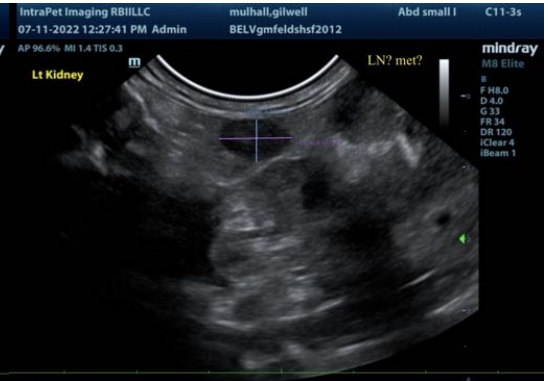
Referral to or consultation with a board certified oncologist is suggested.

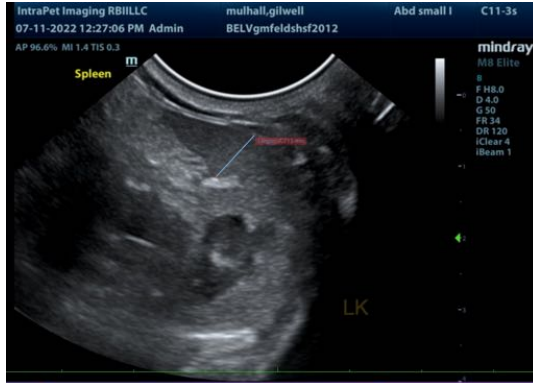
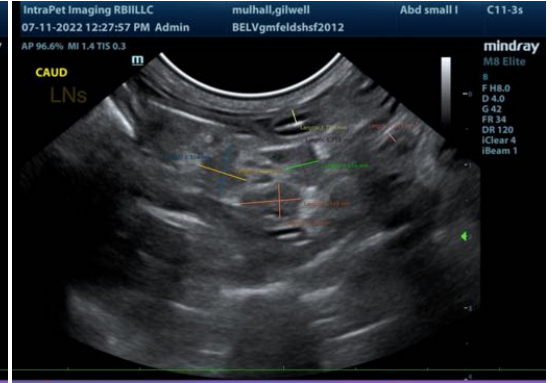
If aggressive chemotherapy or further diagnostics are not pursued, but palliative care is desired, one could consider treating Gilwell for a presumptive diagnosis of a pancreatic carcinoma/adenocarcinoma.

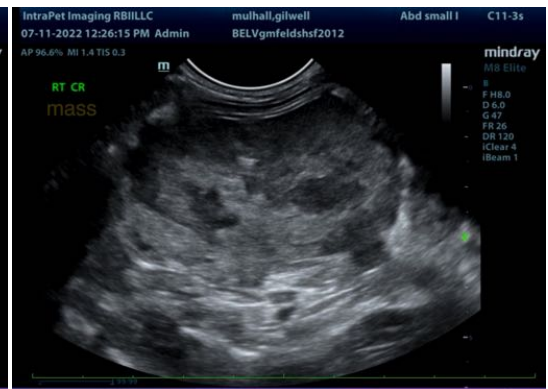
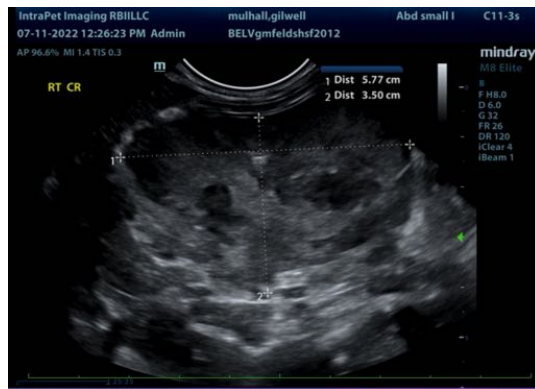
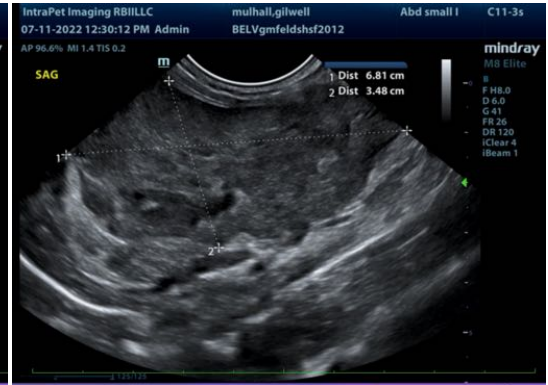
Treatment with

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.







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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