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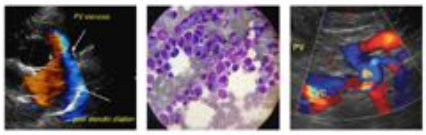

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**PATIENT**
Biggles Smist

**SPECIES**
Feline

**BREED**
Domestic Shorthair

**SEX**
Neutered Male

**AGE**
18 years

**WEIGHT**
12 lbs

**INTERPRETED BY**
Lisa Carioto, DVM, DVSc, Diplomate ACVIM

**IMAGING PERFORMED BY**
Amy Mayhew LVT

**HOSPITAL NAME**
SVS imaging Michigan

**REFERRING VET**
Family Pet Practice

**INVOICE**
31792

**DATE**
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## PRESENTING CLINICAL SIGNS

History: Current Medications: Gabapentin, Prednisolone 5mg 1/2 tablet PO SID, Ursodial 100mg 1 capsule PO EOD, 1 packet Fortiflora mixed with food PO SID Patient History: Presented for decreased appetite, lethargic- started prior to Os going out of town, since O got home last night, P seems to be slowly improving. Was not getting reg meds due to not eating as well for a few days.
Abnormal PE/Chem/CBC/UA Results: BAR - was more lethargic lately 6. hx of Grade II right parasternal heart murmur- well compensated on prev echo, not noted today 7. Normal lung sounds 9/10. Soft abdomen, some palpable formed stool noted. Not reactive on bladder/renal palp. Recent scans suggestive of poss bladder mass 13weight loss - intermittent, muscle wasting noted along dorsum have been monitoring for concerns of IBD, bladder mass, poss renal disease BW pending

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### *Urinary System*

The urinary bladder is well distended. The wall is smooth and regular. No abnormalities are present with the trigone or proximal urethra. A moderate to large amount of free floating and aggregated sediment is present. There is no evidence of cystoliths.

A mass effect measuring 1.34 cm in diameter x 1.28 cm in length appears to be arising from the dorsal wall. It measures 0.74 cm in diameter x 1.38 cm in length in a different view. It has irregular borders and is more echogenic than the first mass. The mass is vascularized and consistent with the mass visualized in February 2022.

**Kidneys**

The **left** kidney measures 4.27 cm (3.80-4.40 cm). The capsule is smooth. The cortex is hyperechoic. Its overall architecture, including the definition of the cortico-medullary junction, is well preserved for a cat of Biggles' age. There are no signs of nephroliths. Very mild pyelectasia is observed (transv = 0.20 cm). The surrounding mesentery is not hyperechoic.

The **right** kidney measures 3.99 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. Very mild pyelectasia is observed (transv = 0.98 mm). The surrounding mesentery is not hyperechoic.

**Aortic bifurcation/trifurcation** No abnormalities observed.

### *Adrenal Glands*

The **left** adrenal gland measures 0.45 cm. No abnormalities are noted with the gland's overall architecture, echogenicity or echotexture. The phrenico-abdominal vein and surrounding vasculature and mesentery are unremarkable.

The **right** adrenal gland measures 0.47 cm. No abnormalities are noted with the gland's overall architecture, echogenicity or echotexture. The phrenico-abdominal vein and surrounding vasculature and mesentery are unremarkable.

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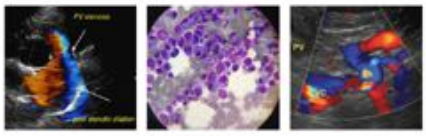

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### *Spleen*

The spleen is within normal limits in size 8.6 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.

### *Liver*

There are no obvious signs of hepatomegaly. The liver's borders are smooth, but mildly rounded. A diffuse, mildly coarse or granular echotexture is observed. Focal lesions are not observed, and no abnormalities are observed with the hepatic vessels.

The **gallbladder** (GB) is mildly distended with a small to moderate amount of echogenic material (sludge). The GB wall is within normal limits in thickness and echogenicity. 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. The parenchyma surrounding the GB is not hyperechoic.

### *Gastrointestinal*

Gas is present in the lumen of the stomach. The gastric wall is within normal limits in thickness and the wall layers are well defined, however, the submucosa of the stomach is mildly prominent. No obvious abnormalities are observed with its peristalsis.

Duodenum: The duodenum is dilated with a moderate amount of fluid, gas and ingesta. An ileus is present in the proximal duodenum. An obvious mass is not visualized.

Jejunum: The mucosa has moderate to severe fogging. Decreased peristalsis is present, i.e., a "to and fro" motion is observed. The ICCJ is thickened, however, the definition of wall layering is preserved.

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

### *Pancreas*

The **left limb** and **body** are mildly enlarged, and mildly to moderately hypoechoic. Its contours are regular. Small, anechoic to hypoechoic nodules of variable size (0.16 cm in diameter x 0.41 cm in length; 0.33 cm in diameter x 0.21 cm in length) are visualized in the parenchyma of the body. The pancreatic duct is mildly dilated at 0.32 cm. The surrounding mesentery is moderately to markedly hyperechoic. Other changes are suggestive of age-related nodular hyperplasia and fibrosis, which may occur due to age, previous episodes of pancreatitis, and amyloid deposition.

**Other**

**Lymph nodes** (LN)

*Ileo-cecal-colic*: A couple of ICCJ LNs are very mildly increased in size 0.57 cm and are mildly prominent. They have smooth borders. They are similar in size and appearance compared to the exam in February.

**Abdominal effusion** is not visualized.

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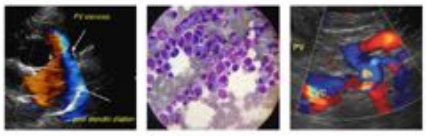

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## ULTRASONOGRAPHIC FINDINGS

- **Urinary bladder**: Bladder mass, most likely a transitional cell carcinoma (TCC). It appears stable in size compared to Biggles' ultrasound in February. Sediment, which may be clinically insignificant, however, one cannot rule out a urinary tract infection or pyelonephritis given the pyelectasia observed. There are no signs of obstructive disease based on its location. A biopsy would be required to obtain a definitive diagnosis, however, TCC is the primary tumour of the urinary bladder in the cat.
- **Kidneys**: Very mild bilateral pyelectasia. Pyelonephritis cannot be excluded despite the absence of classical sonographic signs.
- **Pancreatitis:** Mild, active pancreatitis is suspected. There are also changes suggestive of previous episodes of pancreatitis and age-related changes. Small pancreatic cysts are noted in the body.
- **Liver**: Possible reactive hepatopathy and age-related changes. No major abnormalities observed.
- **Gallbladder:** Gallbladder **sludge** is most likely clinically insignificant, however, gastroesophageal reflux disease (GERD), can occur in some patients. Obtaining a history regarding signs of GERD from the client is suggested. Treatment with an anti-acid or proton pump inhibitor may be required. Obvious signs of cholecystitis are not evident.
- **Gastrointestinal tract**: High index of suspicion of a chronic enteropathy, e.g. IBD. There are no obvious signs of lymphoma or other round cell tumour, however, biopsies, and occasionally immunohistochemistry and PARR, are required to obtain a definitive diagnosis.
- **Lymph nodes**: Very mild lymphadenomegaly most consistent with reactive hyperplasia.
- **Adrenal glands**: high end of normal reference range, attributed to adrenal hyperplasia secondary to stress and/or chronic illness. There are no signs of neoplasia.

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Blood work, including a spec fPL – results pending

Arterial blood pressure

Urine culture and sensitivity to exclude pyelonephritis (obtained by free flow method is recommended). The perineal region may be disinfected with chlorhexidine 0.05% prior to collecting the urine sample (not always possible in cats).

If signs of GERD, 10-14 day trial with famotidine or omeprazole (0.7-1 mg/kg PO q12h)

If weight loss continues, serum cobalamin, folate and TLI may be considered in the future to exclude dysbiosis, , malabsorptive and maldigestive diseases (EPI).

Additional analgesia, including buprenorphine 0.005 mg/kg – 0.01 mg/kg sublingually q8-12 hours for 5-10 days and then PRN, in addition to gabapentin.

Continue supportive care, ensure hydration (e.g., Hydra Care orally)

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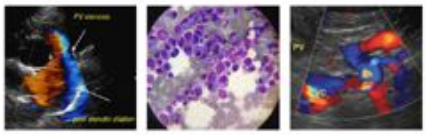

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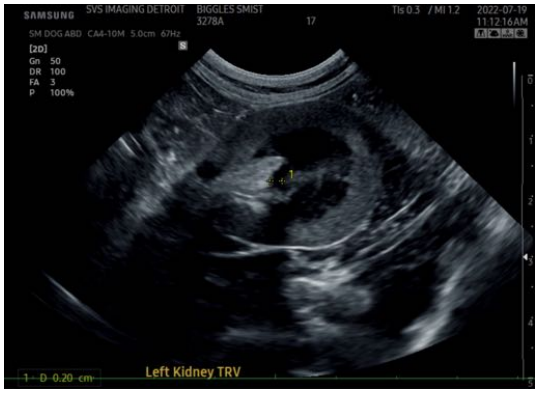


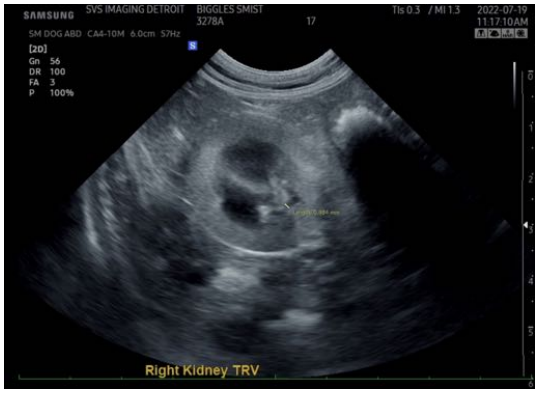


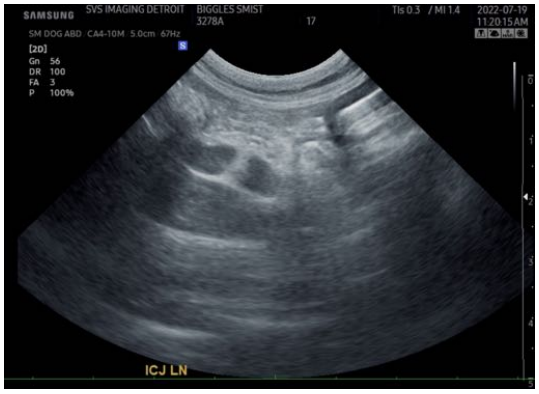


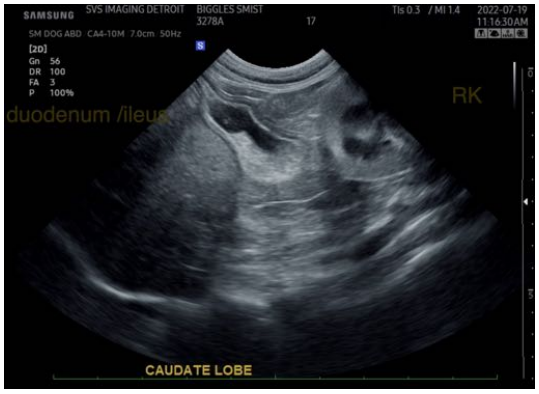


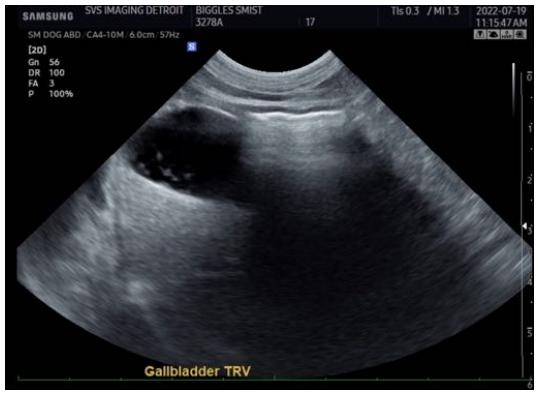


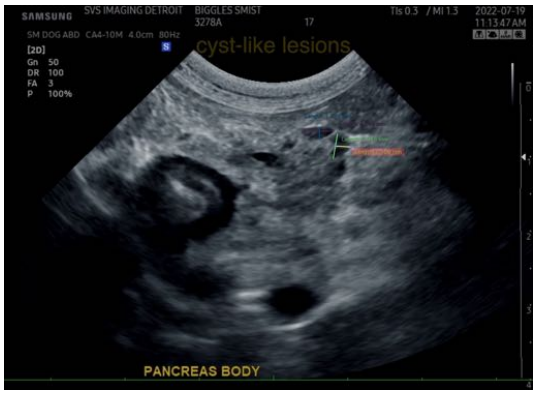


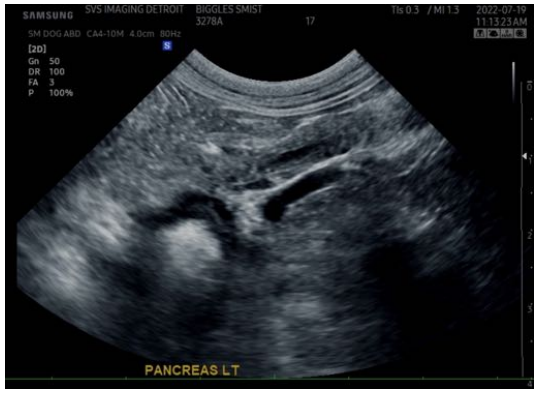


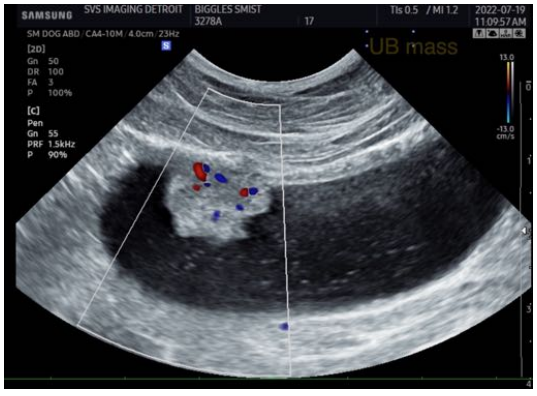

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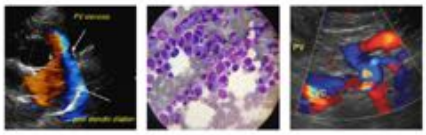

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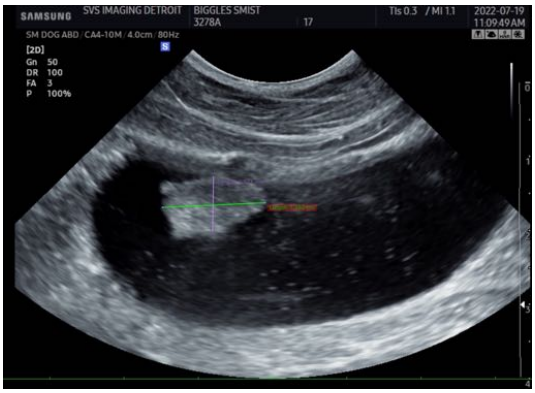


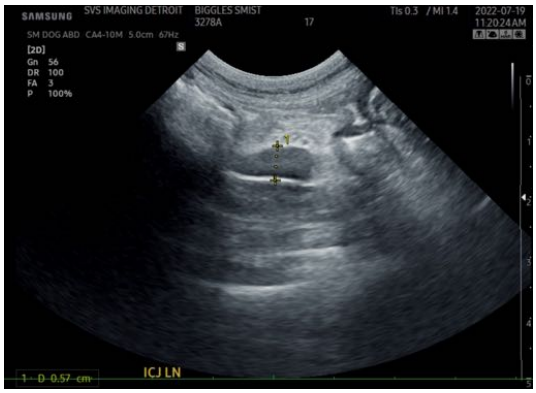


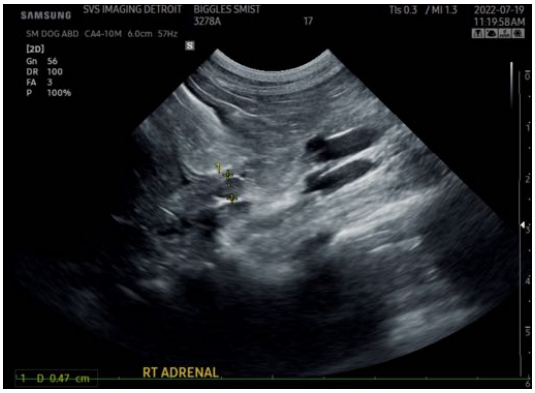


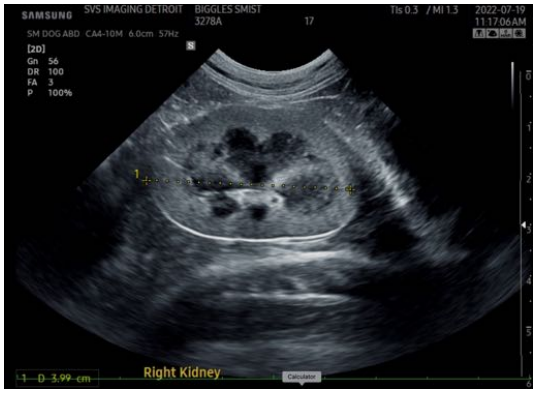


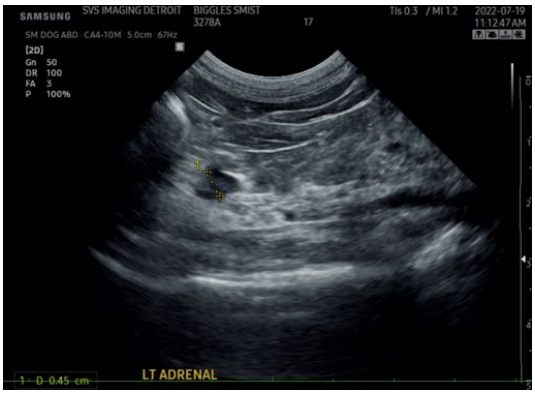


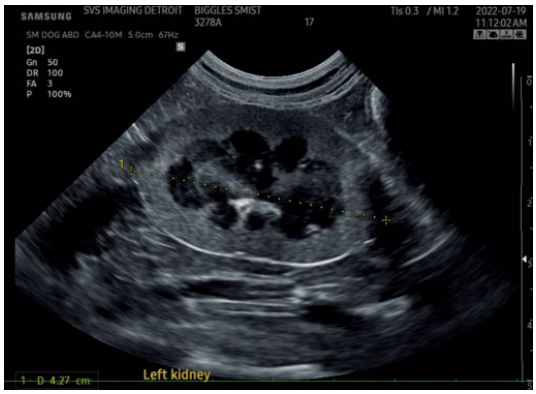


**The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.**

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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