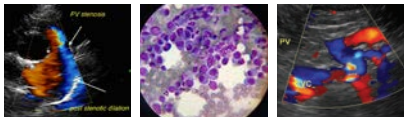
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

DATE

6/30/22

PATIENT

Grey Furboy Arnold

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

7/4/06

WEIGHT

7.81 Pounds

INTERPRETED BY

Lisa Carioto, DVM, DVSc, Diplomate ACVIM

IMAGING PERFORMED BY

Stephanie Pearce RDCS, RVT

HOSPITAL NAME

Charm City VH

REFERRING VET

Dr. Eavers

INVOICE

39152

PRESENTING CLINICAL SIGNS

2/10/22 p presented for pollakiuria. A urine sample could not be obtained at that time so p was treatednwith a Convenia injection.
2/11/22 a UA was checked and there were no significant findings
2/22/22 p was not improving so came in for bw and rads. No evidence of bladder or kidney stones and bw was unremarkable. p was started on c/d diet at that time. 5/23/22 p presented for recheck of pollakiuria and vomiting. o was unable to schedule US at that time. p was treated with Prazosin and Cerenia. 6/15/22 o contacted us to see if there were any other medical treatments for pollakiuria that could be done prior to US. p was treated with Onsior.

Current Medications: None listed.
Lab Results: See attached.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

A soft tissue structure, consistent with a mass, is present within the lumen of the urinary bladder. It fills the lumen almost entirely, except for a small amount of anechoic urine. The mass measures 1.67 cm in diameter x 2.80 cm in length. It is vascularized when evaluated with colour Doppler. It is difficult to identify the origin of the mass due to interference from gas and fecal matter in the colon, however, it appears to be arising from the ventral wall, in the region of the trigone. The bladder wall is smooth and regular and can be followed until the aforementioned area. A proper evaluation of the trigone and proximal urethra cannot be performed due to the colon. Sediment and cystoliths are not visualized.

Kidneys

The **left** kidney measures 4.09 cm (3.80-4.40 cm). The capsule is smooth. The cortex is hyperechoic (i.e., it is iso to hyperechoic to the spleen). A mild loss of the normal definition of the cortico-medullary junction is present. There are no signs of nephroliths or pyelectasia. Blood flow is within normal limits. The surrounding mesentery is mildly hyperechoic.

The **right** kidney measures 3.82 cm (3.80-4.40 cm). The capsule is smooth. Hydronephrosis (pelvis 0.97 cm in transverse view) and hydroureter (0.40 cm) are present. The urine within the pelvis is anechoic except for occasional echogenic foci. Blood flow of the kidney is within normal limits. The surrounding mesentery is mildly to moderately hyperechoic.

Aortic bifurcation/trifurcation

No abnormalities observed.

Adrenal Glands

The **left** adrenal gland measures 0.48 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 0.44 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.

Spleen
The spleen is at the high end of normal reference range 10.3 mm (normal = 10 mm). It is within normal limits in 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 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 portal vein is dilated and larger than the caudal vena cava, i.e., consistent with portal hypertension.

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 stomach is filled with ingesta, thereby affecting evaluation of the stomach. The gastric wall is within normal limits in thickness and the wall layers are well defined.

The duodenum is filled with ingesta.

The small intestinal wall thickness is within normal limits and the definition of the wall layers is preserved. However, fogging of the mucosa and muscularis layers is noted. No abnormalities are observed with the ileocecal colic junction.

The colonic wall is not thickened and mural detail is considered normal. Gas and fecal matter are present within the lumen.

Pancreas
The pancreas is very prominent and easily visualized. It is isoechoic to the spleen. Its contours are smooth and regular. The surrounding mesentery is mildly hyperechoic. Overt signs of neoplasia are not noted.

Other
Lymph nodes
No abnormalities are observed. A large amount of gas is present in the colon, therefore, very subtle changes may be overlooked.

Abdominal effusion is not visualized.

ULTRASONOGRAPHIC FINDINGS

- **Urinary bladder**: A transitional cell carcinoma is the most likely diagnosis for the mass. Its origin appears to be the ventral wall, in the region of the trigone. The mass is likely impinging on the right ureterovesicular junction, causing hydroureter and hydronephrosis.

- **Kidneys**: Left kidney – changes are suggestive of age-related degeneration and possible glomerulonephritis or interstitial nephritis. Pyelonephritis cannot be excluded despite the absence of classical sonographic changes.

- **Pancreas**: A smoldering pancreatitis cannot be excluded. Obvious signs of neoplasia are not appreciated.

- **Spleen**: Splenitis and reactive hyperplasia cannot be excluded (e.g., systemic inflammation).

- **Portal hypertension** is evident

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The following are suggested/recommended:

Definitive diagnosis is not necessarily required to pursue treatment, however, if desired may be pursued. Fine needle aspirates are not suggested due to possible seeding of neoplastic cells in the abdomen. Another option is mild sedation, catheterization of the urinary bladder and "traumatic" aspiration to obtain cells and possibly tissue.

Blood work and a urinalysis and urine culture to evaluate renal function

Urine culture and sensitivity obtained by free flow method

Arterial blood pressure

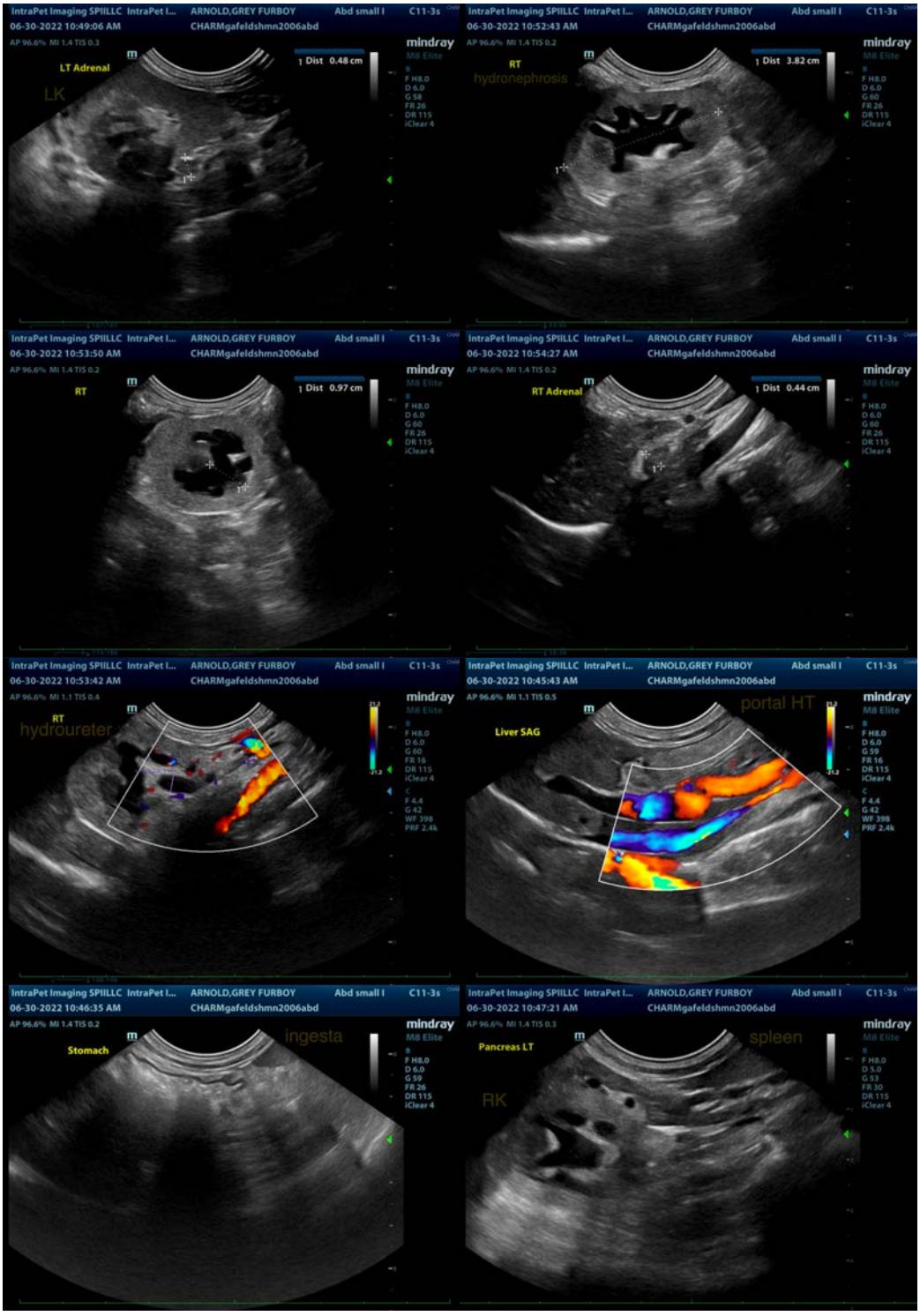
Thoracic radiographs (3 views) to evaluate the sternal lymph nodes

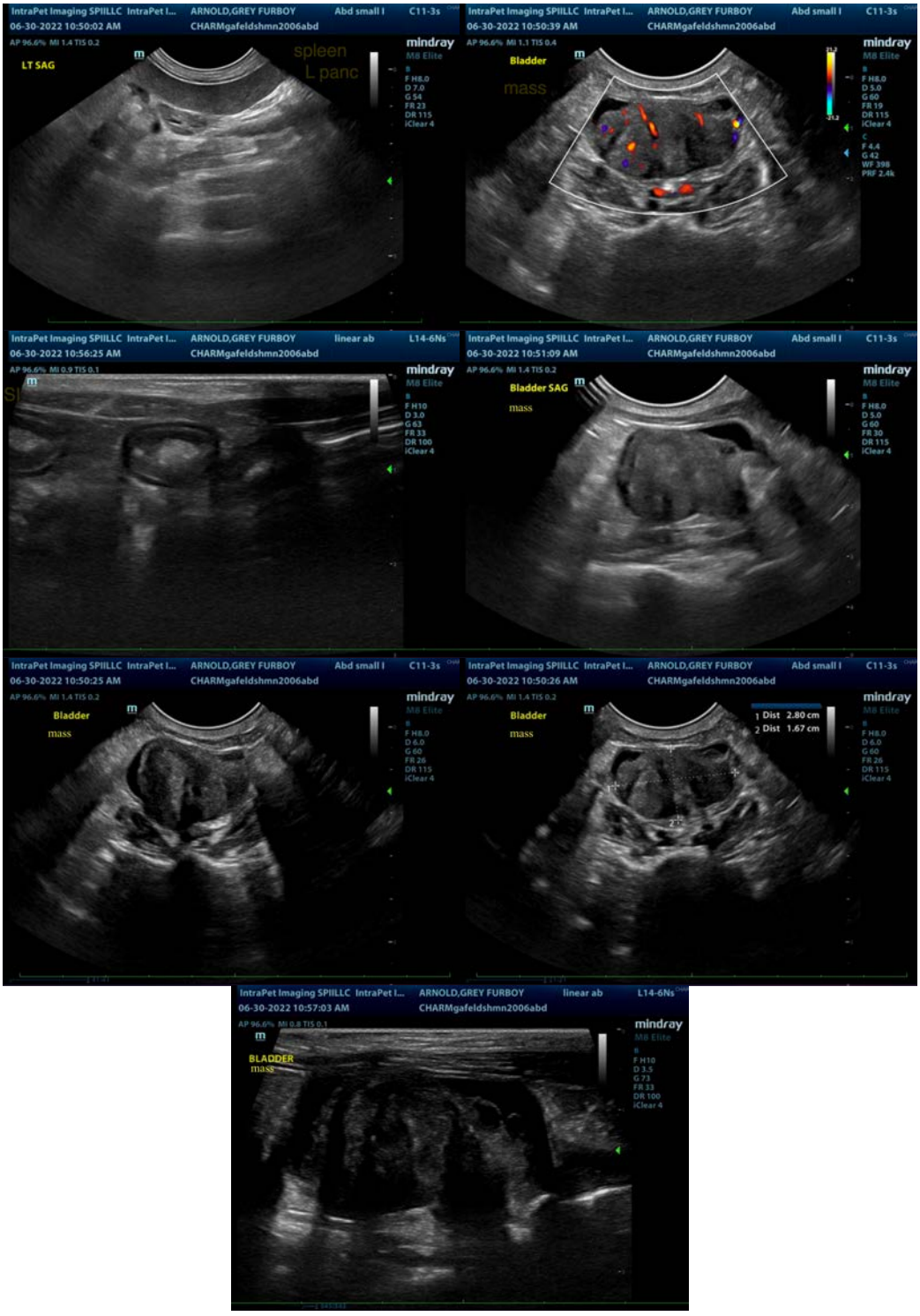
Referral to an internist who specializes in interventional radiology and oncologist to discuss treatment protocols available.

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 buprenorphine and gabapentin.
*gabapentin and buprenorphine
toceranib (Palladia®), a tyrosine kinase inhibitor; well tolerated in cats
+/- chlorambucil; well tolerated in cats

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.


IntraPet Imaging SPIILLC IntraPet I... ARNOLD,GREY FURBOY Abd small I C11-3s
06-30-2022 10:49:06 AM CHARMgafeldshmn2006abd
mindray
LT Adrenal
LK
Dist 0.48 cm
IntraPet Imaging SPIILLC IntraPet I... ARNOLD,GREY FURBOY Abd small I C11-3s
06-30-2022 10:52:43 AM CHARMgafeldshmn2006abd
mindray
RT
hydronephrosis
Dist 3.82 cm
IntraPet Imaging SPIILLC IntraPet I... ARNOLD,GREY FURBOY Abd small I C11-3s
06-30-2022 10:53:50 AM CHARMgafeldshmn2006abd
mindray
RT
Dist 0.97 cm
IntraPet Imaging SPIILLC IntraPet I... ARNOLD,GREY FURBOY Abd small I C11-3s
06-30-2022 10:54:27 AM CHARMgafeldshmn2006abd
mindray
RT Adrenal
Dist 0.44 cm
IntraPet Imaging SPIILLC IntraPet I... ARNOLD,GREY FURBOY Abd small I C11-3s
06-30-2022 10:53:42 AM CHARMgafeldshmn2006abd
mindray
RT
hydroureter
IntraPet Imaging SPIILLC IntraPet I... ARNOLD,GREY FURBOY Abd small I C11-3s
06-30-2022 10:45:43 AM CHARMgafeldshmn2006abd
mindray
portal HT
Liver SAG
IntraPet Imaging SPIILLC IntraPet I... ARNOLD,GREY FURBOY Abd small I C11-3s
06-30-2022 10:46:35 AM CHARMgafeldshmn2006abd
mindray
Stomach
ingesta
IntraPet Imaging SPIILLC IntraPet I... ARNOLD,GREY FURBOY Abd small I C11-3s
06-30-2022 10:47:21 AM CHARMgafeldshmn2006abd
mindray
Pancreas LT
RK
spleen



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

Lisa.Carioto@sonopath.com