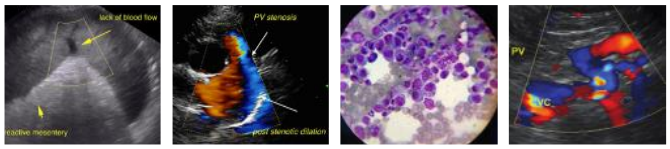
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT

Baker White

SPECIES

Canine

BREED

Golden Retriever

SEX

Neutered Male

AGE

11 Years

WEIGHT

37 kg

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Dr. Callihan

HOSPITAL NAME

Animal Emergency Care

REFERRING VET

Dr. Johnson

INVOICE

20476

DATE

1/8/23

PRESENTING CLINICAL SIGNS

History: S: Presented for vomiting this afternoon (food from breakfast), then very lethargic afterwards. Has had GI upset in past (bloody vomit and diarrhea last fall). O doesn't know what BMs are like now but hasn't seen diarrhea. Also, while lying on O's lap she felt a "vibrating" in his chest and thought he had a rapid HR. Has had heart murmur for a long time per O. Not on any meds. O hasn't offered him dinner tonight. O has never seen him ingest toys, socks, etc.

Abnormal PE/Chem/CBC/UA Results: O: QAR. Panting seems a little weak, slow to get up and some hind leg trembling when standing, but O says that isn't completely unusual for him. MM pink to pale pink. Large soft, fixed, lipoma-like SQ mass on left thorax. HR 100 bpm on presentation, BP very high (250 systolic). I didn't hear a murmur, but he's panting heavily. Abdomen seems a little distended, but no fluid wave balloted. Quick AFAST: no free fluid seen, and spleen looks small and no mass seen TFAST: no pleural or pericardial effusion seen CBC: WNL w/ very mild neutrophilia and monocytosis Chem 17/lytes: all WNL except BG 162, Na 161 (both very mildly high) Right lateral abd. rad to r/o GDV: NAF While having BP taken a second time to confirm how high it is, assistant felt a "vibration" in his chest and they put an ECG on him and he was having VPCs. Only had a few in a row, then back to normal rhythm.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

Urinary bladder is adequately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

Prostate is normal in size, echotexture and echogenicity for a neutered male.

Kidneys are overall normal in size and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortices are uniform in texture with some mild increased cortical echogenicity and mild loss of corticomedullary distinction, expected in this age patient. There is no evidence of pyelectasia, mineral or infarcts observed. The left kidney measured 7.91 cm. The right kidney measured 7.7 cm.

Adrenal Glands

The left adrenal gland is normal in size, shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal. The left adrenal gland measured 0.67 cm at the cranial pole and 0.61 cm at the caudal pole.

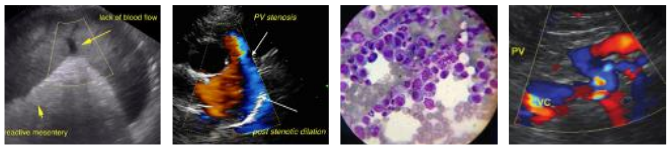
The right adrenal gland is enlarged (3.2 cm x 2.2 cm) with mild heterogenous parenchymal changes. Swollen capsular expansion is noted. An echogenic density within the lumen of the vena cava is concerning for either vascular invasion or a clot/thrombus, secondary to the hypercoagulable state.

Spleen

Spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

Liver

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT
Baker White

SPECIES
Canine

BREED
Golden Retriever

SEX
Neutered Male

AGE
11 Years

WEIGHT
37 kg

INTERPRETED BY
Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY
Dr. Callihan

HOSPITAL NAME
Animal Emergency Care

REFERRING VET
Dr. Johnson

INVOICE
20476

DATE
1/8/23

Liver is subjectively enlarged with mildly irregular margins. Parenchyma is heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

Gastrointestinal

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is mildly distended with echogenic non-shadowing luminal contents and gas consistent with normal ingesta. There is no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The visible small intestines are normal in wall thickness and layering. Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

The visible colon is normal in wall thickness and layering. Contents are consistent with normal formed feces and gas.

Pancreas

The observed pancreas appears appropriately isoechoic to surrounding omental fat. Visible capsule is smooth and normal in contour. Visible pancreatic parenchyma is homogenous and unremarkable. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

There is no evidence of peritoneal effusion. There is no apparent lymphadenopathy.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- The right adrenal mass could represent a benign adenoma or even adrenal hyperplasia, however, given this patients reported hypertension, VPCs and the suspected vascular invasion, a pheochromocytoma or even adenocarcinoma is considered more likely. A clot/thrombus vs vascular invasion is possible given the likely hypercoagulable state and should be further evaluated with an abdominal CT scan.

- Heterogenous Liver – These changes are most consistent with benign processes such as nodular hyperplasia, steroid (vacuolar) hepatopathy, extramedullary hematopoiesis or possibly chronic inflammatory disease and less commonly infiltrative round cell or metastatic neoplasia.

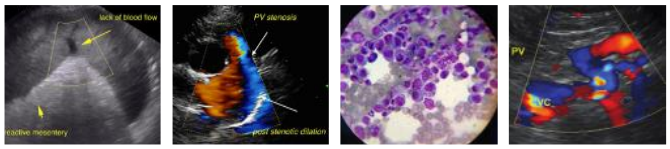
Secondary Findings

- Age- related kidney changes

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Further diagnostic recommendations for this patient could include a low dose dexamethasone suppression test for further evaluation of adrenal cortical activity or urine catecholamine testing to further evaluate the suspected likely pheochromocytoma.

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT

Baker White

SPECIES

Canine

BREED

Golden Retriever

SEX

Neutered Male

AGE

11 Years

WEIGHT

37 kg

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Dr. Callihan

HOSPITAL NAME

Animal Emergency Care

REFERRING VET

Dr. Johnson

INVOICE

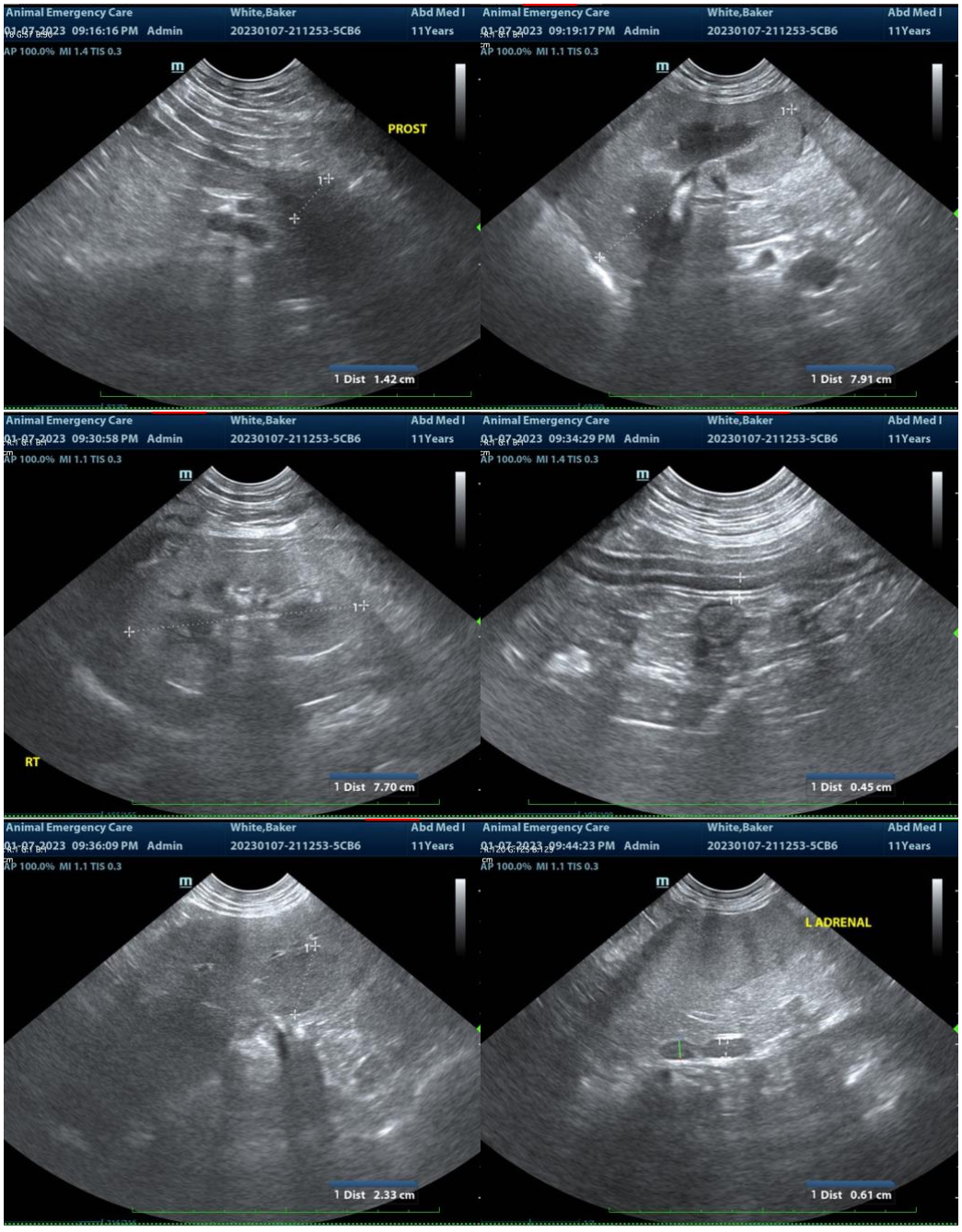
20476

DATE

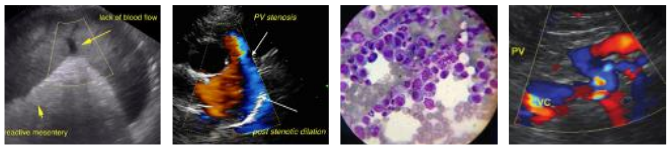
1/8/23

Ultimately, a right adrenalectomy is likely going to be the recommended treatment of choice, therefore a pre-surgical planning abdominal CT scan is also recommended.

In the meantime, medical management of the hypertension, tachycardia, VPCs, etc. is recommended for patient stabilization.



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT

Baker White

SPECIES

Canine

BREED

Golden Retriever

SEX

Neutered Male

AGE

11 Years

WEIGHT

37 kg

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Dr. Callihan

HOSPITAL NAME

Animal Emergency Care

REFERRING VET

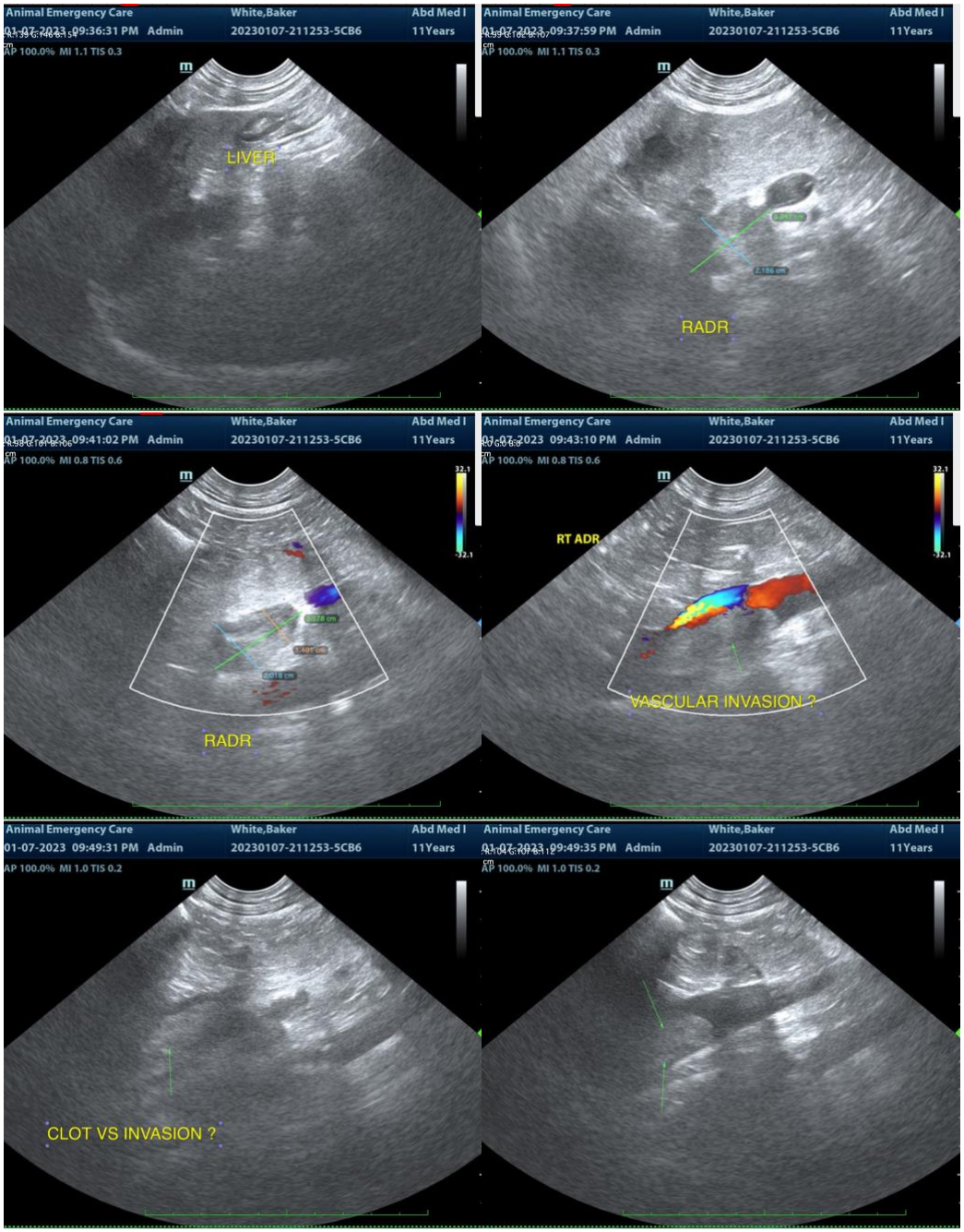
Dr. Johnson

INVOICE

20476

DATE

1/8/23

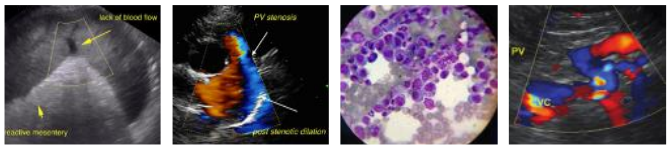


The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Beth Johnson, DVM DACVIM

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT

Baker White

Beth.Johnson@SonoPath.com

SPECIES

Canine

BREED

Golden Retriever

SEX

Neutered Male

AGE

11 Years

WEIGHT

37 kg

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Dr. Callihan

HOSPITAL NAME

Animal Emergency Care

REFERRING VET

Dr. Johnson

INVOICE

20476

DATE

1/8/23