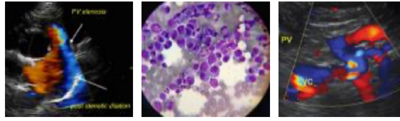


DATE
11/2/21

PATIENT
Eddie Perry

SPECIES
Canine

BREED
Papillon

SEX
Male, neutered

AGE
8/26/2006

WEIGHT
8 lbs.

INTERPRETED BY
Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)

HOSPITAL NAME
Fullerton AH

REFERRING VET
Dr. Baker

INVOICE
12458

PRESENTING CLINICAL SIGNS

History: S: eating, drinking and acting normally, no s/c/v/d, PE: heart auscults with a normal rhythm and a grade 2-3 heart murmur, BCS 3/5, moist pink mm, CRT <2 seconds, OU nuclear sclerosis, right lateral thorax 2 and 3 cm soft sc masses, and a third 1.5 cm soft sc mass on the right.
Current Medications: Spironolactone 1/4 25mg SID, Fish Oil 1/2 pump SID, Benazepril 2.5 mg PO BID, Pimobendan 1.25 mg PO BID, Ursodiol 250 mg tablets 1/4 PO QD, Vitamin E and Revolution.
Lab Results: 9-7-2021 Low dose dex suppression test: normal; 9-16-2021 Urine Catecholamines: normal; 4-9-2021 CBC: wnl Chem: ALK Phos 247 (5-131) H, CK 55 (59-895) L; 5-4-2021 SPG 1.029 PH 5.5, rest normal.
Radiographs: 9-7-2021 3 View Thoracic Radiographs: VHS 9.5, pulmonary parenchyma appears normal, formed stool in the colon, gassy small intestines, empty stomach with some gas in it.
Date of Previous IntraPet Ultrasound: 9-2-21; 4-8-21; 2-16-21; 12-23-20; 11-16-20.
Sedation: Trazadone administered prior to scan.
Stat Report: Approved/requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is mildly distended. The wall is of appropriate thickness for the level of repletion. The mucosal surface is smooth. Luminal contents are anechoic. No cystic calculi are observed. The region of the trigone is normal.

The prostate is not definitively visualized due to its pelvic location.

The left kidney is normal in size (3.07 cm in length) with a slightly irregular shape. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. A few cortical cysts are observed. Trace pyelectasia is present. There is no evidence of hydroureter. Renal vasculature is normal.

The right kidney is normal size (3.90 cm in length) with an irregular shape. There appears to be invasion of the right adrenal mass into the medial aspect of the kidney. In the remainder of the kidney, there is a normal 1:3 cortex to medulla ratio with moderate loss of corticomedullary distinction. Hyperechoic shadowing diverticular foci are observed. Trace pyelectasia is present. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is mildly enlarged, irregular and heterogeneous (0.60 cm at cranial pole) (0.58 cm at caudal pole) (1.68 cm in length). There is loss of glandular detail. The phrenicoabdominal vein and surrounding vasculature are normal.

The right adrenal gland is enlarged (2.09 cm at cranial pole) (1.95 cm at caudal pole) (4.61 cm in length), irregular and heterogeneous with a mass effect. Small, ill-defined cavitated lesions are observed within the mass. The mass appears to be invading into the medial aspect of the kidney. There is no obvious evidence of vasculature invasion. Surrounding mesentery is hyperechoic.

Spleen

The spleen is normal in size (1.15 cm in width at the level of the hilus) with a normal capsular contour. The parenchyma is subtly heterogeneous in appearance. No focal lesions are observed. Splenic vasculature is normal.

Liver
The liver is subjectively normal in size with normal curvilinear peripheral contours. The parenchyma is isoechoic relative to the spleen with a finely heterogeneous parenchymal pattern. 2-3 hypoechoic nodules are observed deep on the left side, the largest measuring 1.05 x 0.74 cm. Vascular and biliary tracts are of normal volume with no evidence of congestion. The gall bladder lumen is distended. The wall is normal in thickness. The lumen is almost completely filled with echogenic to mineralized suspended sludge. The mesentery adjacent to the gallbladder is hyperechoic. The cystic and common bile ducts are normal/not seen.

Gastrointestinal
The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is not distended. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. No obstructive disease is noted.

Pancreas
The right limb of the pancreas is visible with normal curvilinear peripheral contours. The parenchyma is largely isoechoic relative to surrounding omental fat and slightly mottled in appearance. The pancreatic duct is visible but not overtly dilated. There is no evidence of peripancreatic inflammation or effusion.

Free Abdomen
The mesentery in the cranial abdomen is hyperechoic. Trace free fluid is observed. The abdominal lymph nodes are normal/not visible.

ULTRASONOGRAPHIC FINDINGS
Primary Findings:

- Right adrenal mass effect with invasion into the right kidney. Neoplasia (i.e., adenocarcinoma, other) is considered likely with a low possibility of benign pathology. Regional peritonitis is present.
- The gallbladder changes are consistent with a developing mucocele.
- The reactive mesentery adjacent to the gallbladder may represent cholecystitis or may be secondary to right adrenal gland inflammation.

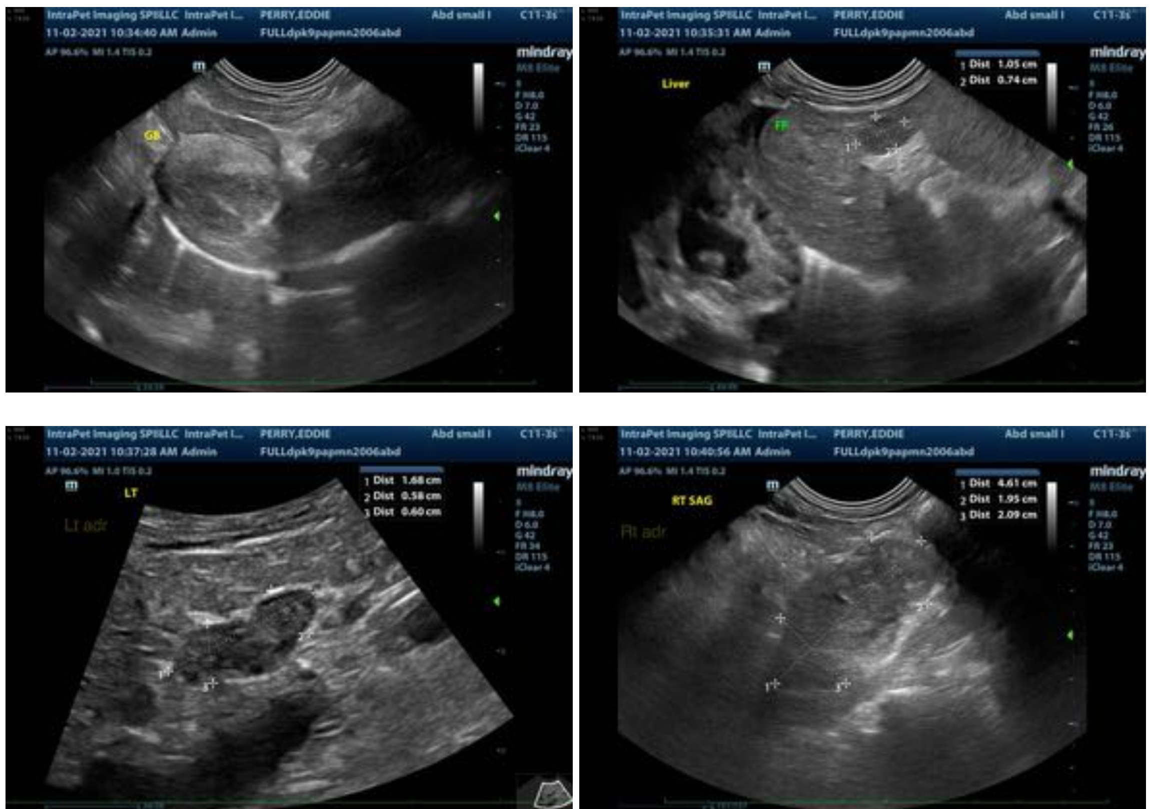
Secondary Findings:

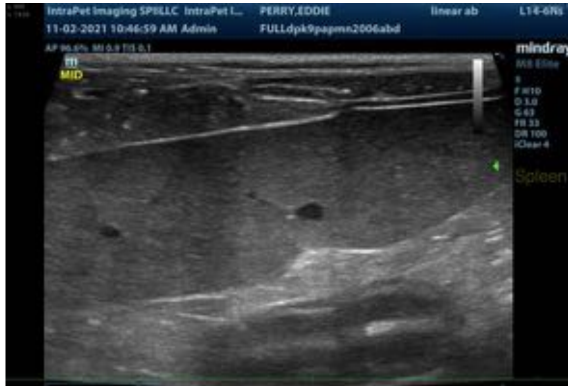
- The hepatic parenchymal changes may be secondary to benign pathology (i.e., regenerative nodular hyperplasia and/or vacuolar hepatopathy). Alternatively, the hypoechoic nodules may represent metastatic disease. Histopathology would be necessary to differentiate.
- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.
- The splenic parenchyma changes are most consistent with a benign process such as lymphoid hyperplasia, extramedullary hematopoiesis or splenitis with a low possibility of infiltrative neoplasia (i.e., lymphoma, mast cell neoplasia).

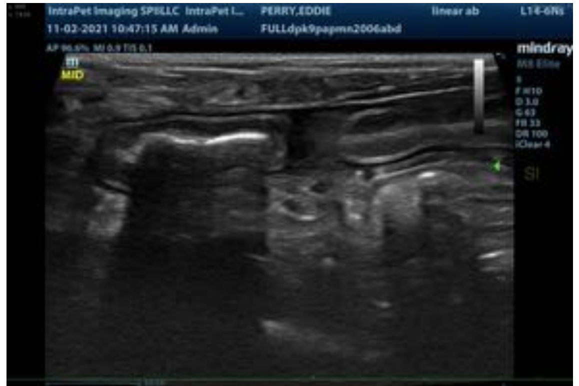
- Age-related left renal pathology with dystrophic mineralization.
- The left adrenomegaly is likely secondary to hyperplastic change.

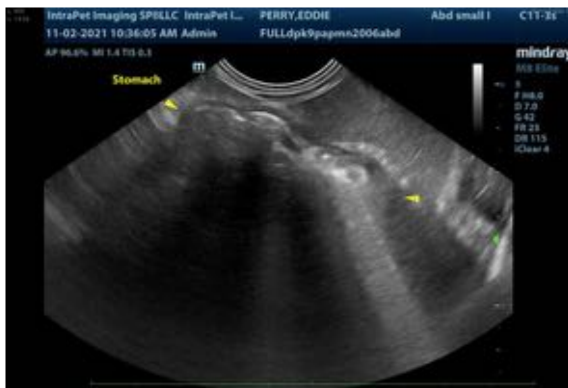
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

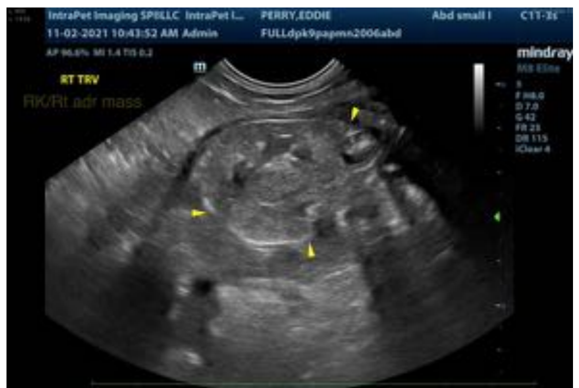
- Three-view thoracic radiographs are recommended to assess for pulmonary metastases.
- If there is no evidence of pulmonary metastatic disease and an aggressive approach is desired, consider referral to a board-certified veterinary surgeon to discuss right adrenalectomy/nephrectomy +/- cholecystectomy. An abdominal CT scan would be useful in pre-surgical planning, particularly to determine vascular invasion of the adrenal mass. However, given the invasiveness of the adrenal mass, the prognosis is considered guarded for this patient.

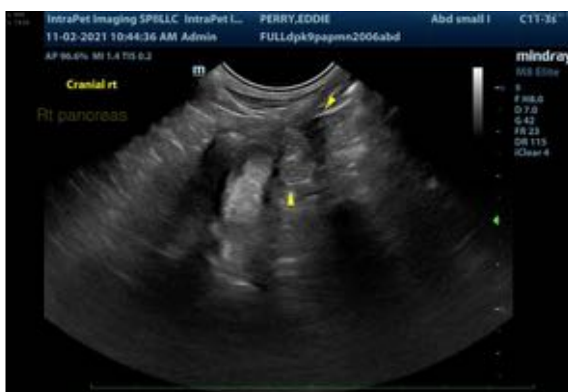












The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)

Andrea.nicastro@sonopath.com