

**DATE PRESENTING CLINICAL SIGNS**

8/11/21

History: ADR, inappetence. History of bilateral stifle sx, recurrent otitis externa. No v/c/s. Pe- thickened stifles with stilted gait - no overt murmur, MM pink/moist with CRT < 2 seconds. eupneic, femoral pulses strong and sync, no petechia or ecchymoses noted. Overall, NSF o/s of historical OA changes.

PATIENT

Toby Dragunas

Current Medications: Rimadyl, Cerenia (doses/frequencies not provided by the veterinarian).

Lab Results: 8/10/21 -Chem 17 - hyperglobulinemia (5.4), ALP elevated 970, significantly elevated amylase 2270 and lipase 5874 mildly decreased Na 106. CBC - mild nonregenerative anemia - 30.9%, thrombocytopenia (confirmed via blood film) - 78k lymphopenia 840. O initially declined work up and elected palliative care so at this time tick panel is still pending.

SPECIES

Canine

BREED

Radiographs: Not provided by the veterinarian.

Spaniel Mixed Breed

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Dog

Sedation: Sedation not required for scan.

SEX

Male Neutered

Stat Report: STAT report not requested by the veterinarian.

AGE

12/30/08

Urinary System

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

WEIGHT

41 lbs.

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

INTERPRETED BY

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

The left kidney is normal size (6.03 cm in length) with a normal shape, smooth peripheral margins, and normal internal architecture. There is mild to moderate loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. A few small nephroliths are visualized. There is no evidence of pyelectasia, infarcts or hydroureter.

HOSPITAL NAME

Churchville Veterinary
Clinic

The right kidney is normal size (5.79 cm in length) with a normal shape, smooth peripheral margins, and normal internal architecture. There is mild to moderate loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. A few small nephroliths are visualized. There is no evidence of pyelectasia, infarcts or hydroureter.

REFERRING VET

Dr. Uhland

Adrenal Glands

The left adrenal gland is normal size (0.62 cm at cranial pole) (0.70 cm at caudal pole) (2.05 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

INVOICE

11621kk

The right adrenal gland is normal size (0.59 cm at cranial pole) (0.58 cm at caudal pole) (1.67 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

Spleen

The spleen is normal in size (1.48 cm in width at the level of the hilus) with a normal capsular contour. There

is appropriate echogenicity and echotexture. A 1.47 cm heterogeneous area is observed approximately mid-spleen. Splenic vasculature is normal.

Liver

The liver is subjectively prominent in size with swollen curvilinear peripheral contours. The parenchyma is isoechoic relative to the spleen and exhibits mild heterogeneity. A 2.32 x 1.89 cm hyperechoic nodule is observed in the deep mid to right liver. Hepatic vasculature and biliary tracts are of normal volume with no evidence of congestion. The gall bladder lumen is moderately distended. The wall is thin and smooth. A moderate amount of aggregated, echogenic, suspended sludge is observed within the lumen. 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 body/right limb of the pancreas is enlarged with slightly irregular peripheral contours. The parenchyma is largely isoechoic relative to surrounding omental fat and subtly mottled in appearance. No distinct focal lesions are observed. The pancreatic duct is not overtly dilated. There is no evidence of peripancreatic effusion.

Free Abdomen

There is no evidence of free fluid. A few prominent mid-abdominal lymph nodes are visualized with the largest measuring 1.84 cm in length.

ULTRASONOGRAPHIC FINDINGS

Primary Findings:

- The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, regenerative nodular hyperplasia, and/or age-related remodeling. Inflammatory and infiltrative disease are considered less likely.
- Excessive gall bladder sludge, non-mucocele.
- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis, or chronic pancreatitis.

Secondary Findings:

- The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.
- The heterogenous area within the splenic parenchyma trends towards the benign (i.e., a focus of lymphoid hyperplasia or myelolipoma) with a lower possibility of emerging neoplasia.
- Bilateral, age-related renal changes with dystrophic mineralization and non-obstructive nephroliths.

**An obvious cause for the patient's anemia and thrombocytopenia is not identified in this study. Considerations include tick-born disease, immune-mediated disease, occult neoplasia, other. There is no obvious evidence of neoplasia.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

1. A comprehensive tick panel, including PCR and serology (submission to North Carolina State University's Vector Borne Disease Diagnostic Lab) is recommended.
<https://cvm.ncsu.edu/research/labs/clinical-sciences/vector-borne-disease/>
2. Three-view thoracic radiographs are recommended to assess for occult neoplasia in the chest.
3. Consider a PLI +/- a full malabsorption panel to further assess for pancreatitis/underlying gastrointestinal disease.
4. Consider initiation of doxycycline while awaiting test results.



