


PATIENT PRESENTING CLINICAL SIGNS

Linda Sosia History: Linda presented today, 3-13-23, for an evaluation as pt has been ADR during the weekend, is depressed, anorexic, doesn't want to walk, and very pale mucous membrane. On 3-11-23 pt had vomited and was lethargic too. Pt is not up to date on vax since 2017 and is not on preventions.

SPECIES

Canine

BREED

Labrador Retr Mix

Abnormal PE/Chem/CBC/UA Results: Pe: Quiet, depressed, and lethargic. Pale MM, Temp 103.9F, Mild distension of abdomen, left nostril has some discharge (purulent) noticed today for the first time. Abdominal component breathing. CBC: RBC 2.30 M/ μ L 5.65 - 8.87 HCT 18.2 % 37.3 - 61.7 HGB 6.0 g/dL 13.1 - 20.5 WBC 27.89 K/ μ L 5.05 - 16.76 NEU * 14.95 K/ μ L 2.95 - 11.64 LYM * 9.10 K/ μ L 1.05 - 5.10 MONO * 3.64 K/ μ L 0.16 - 1.12 PLT * 81 K/ μ L 148 - 484 CHEM: SDMA 20 μ g/dL 0 - 14 GLOB 4.7 g/dL 2.5 - 4.5 ALT: did not read (imagine is too high) ALKP 1688 U/L 23 - 212 LIPA 2700 U/L 200 - 1800 4Dx: Negative to all U/A: SG: 1.030, NO bacteria, 2+ protein, Lepto in-house antibody: neg

SEX

Spayed Female

AGE

11 years

WEIGHT

47 lbs

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN
Urinary System

The urinary bladder wall is normal in thickness and the mucosal surface is smooth. The bladder is moderately distended. A small amount of suspended echogenic debris is observed within the lumen. No masses, inflammatory changes or calculi are observed. The region of the trigone and visible portion of the proximal urethra are normal.

The left kidney is normal in size (6.66 cm in length) with a normal shape, architecture and smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. The cortex is isoechoic relative to the spleen. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis.

The right kidney is normal in size (6.50 cm in length) with a normal shape, architecture and smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. The cortex is isoechoic relative to the spleen. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis.

INTERPRETED BY

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 Diplomate ACVIM (*Small Animal Internal Medicine*)

IMAGING PERFORMED BY

Dr. Ferrer, DVM

Left adrenal gland

The left adrenal gland is normal in size (0.63 cm at cranial pole) (0.69 cm at caudal pole) (2.66 cm in length) with a normal shape and homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

Right adrenal gland

(See "Other" category).

HOSPITAL NAME

Paseos VC

Spleen

The spleen is prominent in size (2.15 cm in width at the level of the hilus) with normal curvilinear peripheral contours. There is appropriate echogenicity and echotexture. A 1.01 cm irregular hypoechoic nodule is visualized approximately mid-spleen. Splenic vasculature is normal.

REFERRING VET

Dr. Gabriel Ferrer

Liver

The liver is subjectively enlarged with slightly swollen peripheral contours. The parenchyma is hyperechoic relative to the spleen and diffusely homogeneous in appearance. No distinct focal lesions are observed. Vascular and biliary tracts are of normal volume with no evidence of congestion.

INVOICE

12410

DATE

3.13.23

The gall bladder is moderately distended. The wall is slightly thickened (up to 0.61 cm) with a subtle double-walled effect. A small to moderate amount of suspended echogenic debris 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. There is no evidence of an obstructive pattern.

Pancreas

The right limb of the pancreas is normal in size with normal curvilinear peripheral contours. The parenchyma is largely hyperechoic 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

Trace free fluid is observed. One to two prominent lymph nodes are observed near the aortic trifurcation (the largest measuring 2.49 cm in length). (See also "Other" category).

Other

A 4.55 x 2.99 cm irregular heterogenous, slightly cavitated mass is observed in the right cranial quadrant, in the region of the right adrenal gland. Surrounding mesentery is hyperechoic. There is a possible tumor thrombus in one of the vessels adjacent to the mass. In addition, an approximately 2.50 cm lobulated echogenic to slightly heterogenous structure/mass is observed just caudal to the large mass in the right cranial quadrant.

ULTRASONOGRAPHIC FINDINGS

Primary Findings.

- The origin of the mass in the right cranial quadrant is unclear. It is likely arising from the right adrenal gland. However, lymph node, mesenteric, pancreatic or other origin cannot be excluded. Neoplasia (i.e., adenocarcinoma, pheochromocytoma) is suspected with a lower possibility of a non-neoplastic process. The smaller mass just caudal to the larger one may represent an extension of the larger mass, portal lymphadenopathy, metastasis to the mesentery, other. Adjacent peritonitis is present. There is a possible associated tumor thrombus.
- Nonspecific diffuse hepatopathy. Differentials include inflammatory disease, infiltrative neoplasia, vacuolar hepatopathy, other hepatopathy, or some combination thereof

Secondary Findings

- Bilateral chronic age-related renal changes
- The splenomegaly may be secondary to sedation, a benign process (i.e., lymphoid hyperplasia or similar), or less likely, emerging neoplasia. The hypoechoic splenic nodule trends toward the benign (i.e., focus of lymphoid hyperplasia) with a lower possibility of an emerging tumor.
- Gall bladder debris, non-mucocele

- The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.
- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Given the concern for a possible right adrenal mass, consider the following:
 1. Three-view thoracic radiographs are recommended to assess for pulmonary metastases.
 2. Baseline blood pressure measurement
 3. Further testing for a functional tumor (i.e., low-dose dexamethasone suppression test, urine/blood catecholamine levels)
 4. UPC to assess for proteinuria.
 5. Abdominal CT scan better assess the lesion and to evaluate for surgical resectability



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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