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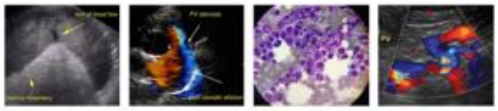

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PATIENT

Star Moser

SPECIES

Canine

BREED

Mixed

SEX

Female Spayed

AGE

11 years

WEIGHT

36 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

Pamela Harrigan, RDCS

HOSPITAL NAME

Littleton AH

REFERRING VET

Tatyana Kalani, DVM

INVOICE

12442

DATE

3.16.23

PRESENTING CLINICAL SIGNS

History: Inguinal masses with bruising - r/o neoplasia (hemangiosarcoma) vs, reactive lymph nodes vs. other. Cytology showed NSF. Cultured Staphylococcus hominis - 2+. Treated with Cefpodoxime 100mg PO SID with mild improvement. Last labs run 6/21/22 w/ NSF. Last round of atbs started 3/10/22. Since ultrasound was ordered, the sub mandibular and popliteal LNs have become enlarged. FNAs were taken at time of study.

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. Luminal contents are anechoic. No cystic calculi are observed. The region of the trigone and the proximal urethra, visible to a depth of 1-2 cm, are normal.

The left kidney is normal in size (5.72 cm in length) with a normal shape, architecture and smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. There is a questionable 1.32 cm hypoechoic-to-isoechoic nodule in the medulla at the cranial aspect. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal in size (5.58 cm in length) with a normal shape, smooth peripheral margins, and normal internal architecture. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is enlarged (1.12 cm at cranial pole) (2.33 cm at caudal pole) with an irregular shape. A 1.03 x 1.03 cm echogenic nodule is observed at the cranial pole. In addition, a 3.27 x 6.60 cm hyperechoic-to-heterogenous mass is observed at the caudal pole. Within this mass, a 1.01 x 0.75 cm lesion, with a hypoechoic center and a hyperechoic rim is observed at the cranial aspect. Hyperechoic nodules are also observed within the mass, along with a few small, ill-defined cavitated areas. There is no obvious evidence of vascular invasion.

The right adrenal gland is in normal size (0.49 cm at cranial pole) (0.53 cm at caudal pole) with a slightly irregular shape. There is a questionable 0.93 x 0.58 cm isoechoic-to-hyperechoic nodule approximately mid-gland. The remaining glandular echogenicity and detail are normal. Surrounding vasculature appears normal.

Spleen

The spleen is subjectively prominent in size (1.82 cm in width at the level of the hilus) with scalloping of the medial contour and mild rounding at the poles. The parenchyma is diffusely and severely mottled, with a “moth-eaten” appearance. A 1.52 cm irregular, hypoechoic to slightly heterogenous nodule is observed near the hilus. In addition, a few irregular, hypoechoic nodules are seen throughout the organ (the largest measuring 1.08 cm in diameter). Splenic vasculature appears normal with no evidence of thrombosis.

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.

The gall bladder is moderately distended. The wall is mildly thickened (up to 0.21 cm), irregular and hyperechoic. A 2.27 cm cholelith is observed within the lumen, along with a small amount of suspended echogenic debris. 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 ileocecocolic junction and colonic wall are normal. There is no evidence of an obstructive pattern.

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

Trace free fluid is observed. The lymph nodes throughout the abdomen are severely enlarged, rounded and hypoechoic. One of the largest nodes measures 4.82 cm in length. A few of the mesenteric lymph nodes have ill-defined cavitated areas. The mesentery surrounding the nodes is hyperechoic.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- The severe diffuse lymphadenopathy and splenic parenchymal changes are more concerning for infiltrative neoplasia. Lymphoma is the top differential. There is a lower possibility of a severe inflammatory process (i.e., pyogranulomatous). Mild peritonitis is present, likely secondary to lymph nodes and splenic pathology.

- Left adrenal mass and nodule. Differentials include macronodular hyperplasia or emerging tumors (i.e., adenoma, adenocarcinoma, pheochromocytoma).

- The hepatic parenchyma changes could be consistent with vacuolar hepatopathy (i.e., idiopathic/endocrine), infiltrative neoplasia, inflammatory disease, other.

- Questionable left renal nodule. This may represent an imaging artifact, tumor, granuloma, other.

Secondary Findings

- Large cholelith, non-obstructive

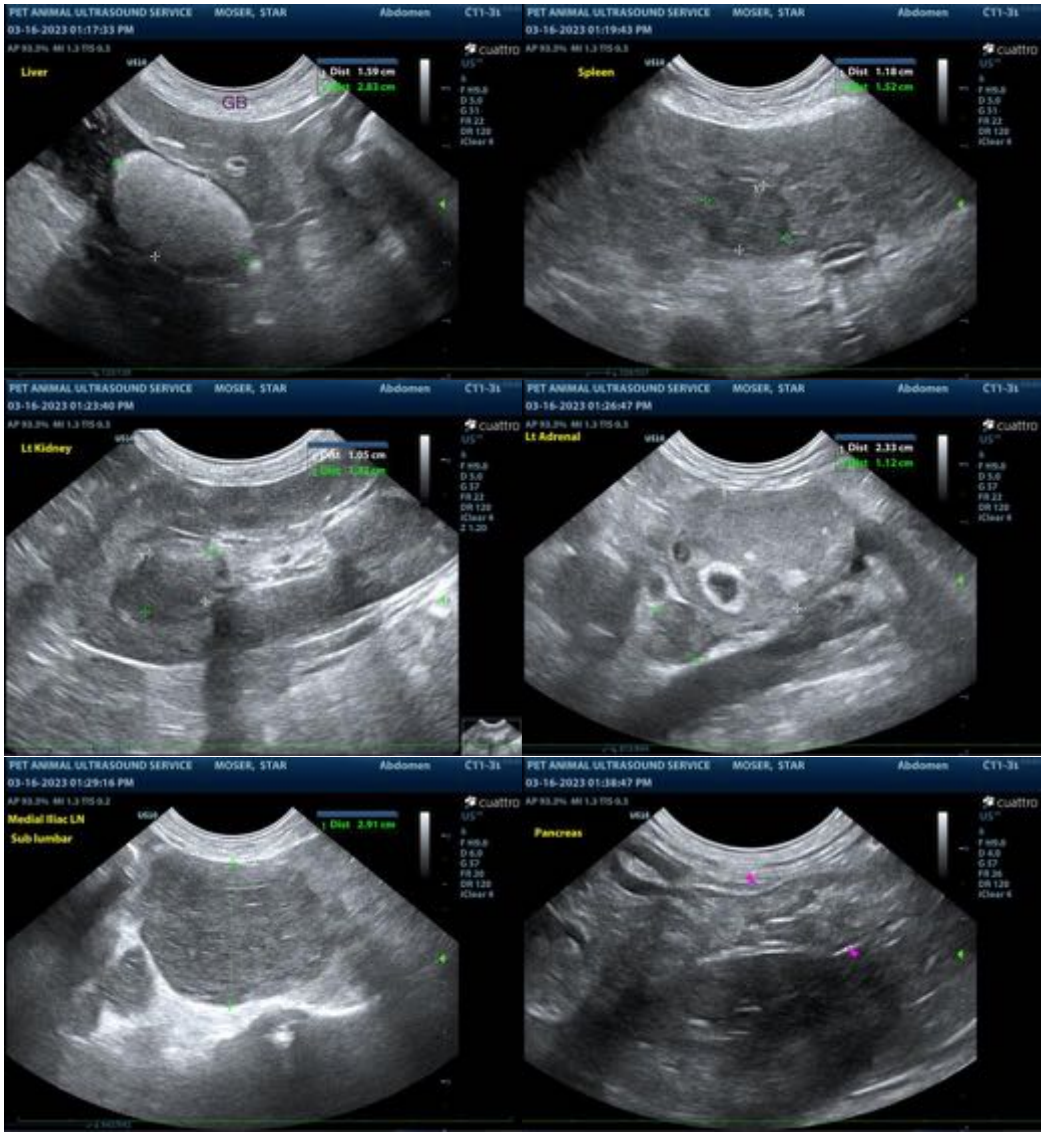
- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Thoracic radiographs are recommended to assess for lymphadenopathy in the chest.

- Baseline lab work, including a CBC, chemistry panel, urinalysis and T4 is recommended to assess overall metabolic function (if not already performed).

- If peripheral lymph node cytology results are inconclusive, additional testing (i.e., PARR, splenic aspirate or lymph node biopsies) may be necessary to get a definitive diagnosis.



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.

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