

**DATE PRESENTING CLINICAL SIGNS**

10/5/21 Patient has developed cough, distended abdomen.

PATIENT Lab Results & Radiographs: Low globulins, borderline low albumin, low calcium, elevated precision PSL, high white count with a neutrophilia and a lymphocytosis, monocytosis.

LuLu Gray

Date of Previous IntraPet Ultrasound: No previous.

SPECIES Sedation: Sedation not necessary.

Canine

Stat Report: Stat not requested.

BREED **ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

Maltese

*This scan was slightly limited due to patient's breathing pattern.

SEX *Urinary System*

Female Spayed

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.

AGE

2007

The left kidney is normal in size (2.99 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. There is minimal loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis.

WEIGHT

4.3 lbs.

One still image of the right kidney is available for interpretation. The left kidney is normal size (3.05 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with slight loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

INTERPRETED BY

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Adrenal Glands

The left adrenal gland is normal size (0.30 cm at cranial pole) (0.46 cm at caudal pole) (1.37 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.

HOSPITAL NAME

Padonia Veterinary
Hospital

One still image of the caudal pole of the right adrenal gland is available for interpretation. The gland is normal size (0.48 cm in width) with a normal shape, glandular echogenicity and detail.

REFERRING VET

Dr. Youssef

Spleen

The spleen is normal in size (0.64 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

*Liver***INVOICE**

12284

The liver is subjectively prominent in size with slightly swollen peripheral contours. The parenchyma is hypoechoic relative to the spleen. Several ill-defined hypoechoic nodules/areas are observed throughout the organ, the largest measuring 1.40 cm in diameter. Vascular 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 small to moderate amount of aggregated echogenic to mineralized adherent sludge is observed within the lumen. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The gastric lumen is mildly distended with ingesta. 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 segmentally dilated with fluid (mild). The small intestinal wall thickness is borderline thickened (up to 0.37 cm) with a normal layering pattern. There is evidence of mucosal fogging in several segments. 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 throughout the abdomen is hyperechoic. Trace free fluid is observed. The abdominal lymph nodes are normal/not visible.

Other

A brief echocardiogram reveals no evidence of pericardial effusion or obvious chamber enlargement. A moderate to large amount of anechoic pleural effusion is present. The caudal vena cava is not overtly dilated.

ULTRASONOGRAPHIC FINDINGS

Primary Findings:

- Based on the clinical history and sonographic changes, a protein-losing enteropathy (i.e., inflammatory bowel disease, lymphangiectasia, infiltrative neoplasia (i.e., lymphoma), infectious/parasitic disease) is suspected.
- The trace ascites and pleural effusion may be secondary to low oncotic pressure and/or increased vascular permeability. Right-sided congestive heart failure is considered unlikely based on the brief echocardiogram.
- The hepatic nodules could be consistent with benign pathology (i.e., regenerative nodules) or potentially a neoplastic process (i.e., round cell tumor).

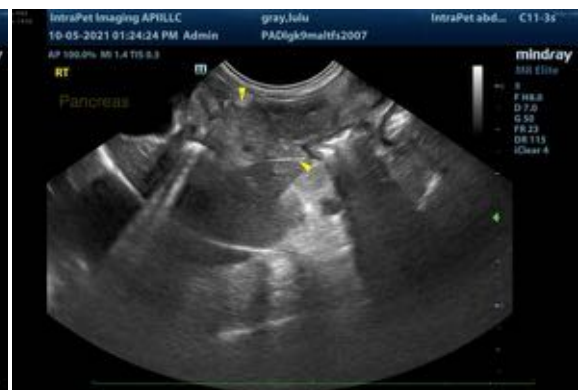
Secondary Findings:

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

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Three-view thoracic radiographs are recommended to assess cardiopulmonary status.
- Submission of the pleural fluid for fluid analysis and cytology is recommended. A therapeutic thoracocentesis should be performed to improve patient comfort. If the cytology results are inconclusive and an aggressive approach is desired, consider an abdominal exploratory with gastrointestinal and hepatic biopsies. A malabsorption panel should also be considered as well as a fecal evaluation for ova and Giardia.





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.

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