



PATIENT

Aretha Groth

PRESENTING CLINICAL SIGNS

History: Respiratory distress, anorexia, coughing and exercise intolerance. RDVM request US guided FNA and cytology of lung nodules and spleen.

SPECIES

Canine

Abnormal PE/Chem/CBC/UA Results: Radiographs of chest, 3 views, reveal nodular interstitial infiltrates throughout the lungs. CBC reveals anemia and lymphopenia. Chemistry increases in BUN, SAT and lipase. Occult HW test negative.

BREED

Labrador

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder is moderately distended. A scant amount of suspended, echogenic debris is observed within the lumen. 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.

SEX

Female spayed

The left kidney is normal size (5.84 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

AGE

13.5 Years

The right kidney is normal size (8.17 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

WEIGHT

92 lbs.

Adrenal Glands

The left adrenal gland is normal size (0.42 cm at cranial pole) (0.55 cm at caudal pole); 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.

The right adrenal gland is enlarged (2.31 cm at cranial pole) (1.51 cm at caudal pole) (4.27 cm in length) with a mass-effect. The parenchyma is slightly heterogeneous with hyperechoic to mineralized areas approximately mid-gland. There is loss of glandular detail. There is no obvious evidence of vascular invasion.

INTERPRETED BY

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

Spleen

The spleen is normal in size (1.99 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.

IMAGING PERFORMED BY

Dr. Beard

HOSPITAL NAME

West Prince Animal
Hospital

REFERRING VET

Dr. Hartman

Liver

The liver is subjectively enlarged with swollen, rounded peripheral contours. The parenchyma is isoechoic relative to the spleen and subtly heterogeneous in appearance. No distinct focal lesions are observed. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion. The gall bladder is moderately distended. The wall is slightly thickened and hyperechoic. A moderate to large amount of aggregated, echogenic, suspended sludge in a partially stellate pattern is observed within the lumen. The cystic and common bile ducts are normal/not seen.

INVOICE

11777kk

DATE

9/8/21



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Gastrointestinal

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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.

SPECIES

Canine

Pancreas

BREED

Labrador

The left 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.

SEX

Female spayed

Free Abdomen

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

AGE

13.5 Years

ULTRASONOGRAPHIC FINDINGS

- The hepatic parenchymal changes are non-specific and could be secondary to benign, age-related pathology (i.e., nodular hyperplasia, vacuolar hepatopathy); alternatively, inflammatory disease or infiltrative neoplasia are possible. Neoplasia is considered less likely.
- The gall bladder changes are consistent with a developing mucocele.
- Right adrenal mass-effect. Differentials include neoplasia (i.e., adenoma, adenocarcinoma, pheochromocytoma) versus benign nodular hyperplasia.

WEIGHT

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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

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Diplomate ACVIM
(*Small Animal Internal
Medicine*)

1. Consider further pulmonary evaluation (i.e., bronchoscopy with cytology and cultures), particularly if fine needle aspirate of the lung nodules is non-diagnostic. Fungal testing may also be warranted, depending on the patient's geographic area and travel history.
2. Given the right adrenal findings, consider the following:
 - a. A baseline blood pressure measurement.
 - b. Further testing (i.e., low-dose dexamethasone suppression test, urine/blood catecholamine levels) for a functional tumor (when respiratory issues are stabilized).
3. Given the gall bladder changes, Ursodeoxycholic acid (Ursodiol) can be considered. Serial sonographic monitoring (e.g., every 6-8 weeks) of the gall bladder is recommended to assess for progression to a fully-formed mucocele.

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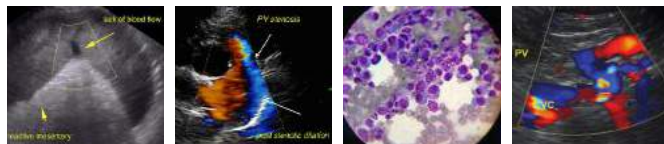
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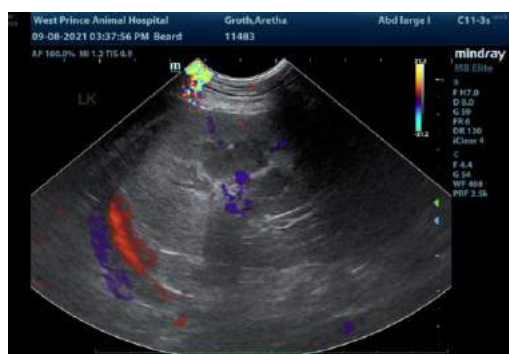
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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