



PATIENT PRESENTING CLINICAL SIGNS

Max Ojeda
SPECIES
 Canine
BREED
 Chihuahua

History: Presented as a referral for an echo and abdominal ultrasound. Pt has a history of sporadic cough especially when they touch him in the neck region. But recently has been frequent. Eating well, No V/D. Feeding i/d. 4/6-sided murmur. Mild Crackles L>R side. Tx Pimobendan 1.25 mg BID Furosamide @ 2mg/kg BID

Abnormal PE/Chem/CBC/UA Results: SPO2 96%, 177bpm CBC: Neutrophilia and basophilia, thrombocytosis Chem: Mild elevation of ALT (289) and ALKP (468) Fecal: Negative X-ray: Mild extrathoracic narrowing of the trachea. Mild interstitial lung pattern. VHS 10.7. Gas-distended stomach Hepatomegaly. Coprostaia, Gas within intestines

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

SEX *Urinary System*

Neutered Male

The urinary bladder is moderately distended. The wall is normal in thickness with a smooth mucosal surface. A 0.26 cm cystic calculus is observed within the lumen, along with a scant amount of suspended, echogenic debris. The region of the trigone and visible portion of the proximal urethra are normal.

AGE

9 years

The prostate is normal in size (0.75cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

WEIGHT

12.3 lbs

The left kidney is normal size (4.14 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. Several, small, nonobstructive nephroliths are visualized. There is no evidence of pyelectasia, infarcts or hydroureter.

The right kidney is normal size (4.32 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.

INTERPRETED BY

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IMAGING PERFORMED BY

Dr. Ferrer, DVM

HOSPITAL NAME

Paseos VC

REFERRING VET

Dra. Maldonado

Adrenal Glands

The left adrenal gland is normal size (0.41 cm at cranial pole) (0.41 cm at caudal pole) (1.95 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.

The right adrenal gland is normal size (0.41 cm at cranial pole) (0.35 cm at caudal pole) (1.87 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 (1.07 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

The liver is subjectively prominent in size with a slightly irregular peripheral margin on the right side. The parenchyma is isoechoic relative to the spleen and subtly heterogenous in appearance. An approximately 3.00 irregular, hyperechoic to heterogenous nodule/swelling is observed on the right side. The lesion causes slight capsular expansion. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

INVOICE

11887

DATE

11.21.22

The gall bladder lumen is moderately distended. The wall is thin and smooth. A moderate amount of aggregated, echogenic debris/sludge is observed within the lumen, most of which is gravity dependent and some of which is suspended. 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 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 peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Right hepatic swelling/mass. Differentials include neoplasia (i.e., adenoma, adenocarcinoma) versus a benign process (i.e., regenerative nodular hyperplasia). The diffuse hepatic parenchymal changes trend toward the benign (i.e., regenerative nodular hyperplasia and/or vacuolar hepatopathy). However, an inflammatory process, reactive hepatopathy, copper hepatotoxicosis, other hepatopathy, cannot be completely excluded.
- Small, cystic calculus

Secondary Findings

- Minor age-related pancreatic remodeling
- Gall bladder debris/sludge – incidental
- Bilateral nonobstructive nephrocalcinosis

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Consider a fine-needle aspirate of the right hepatic swelling/mass. If cytology results are inconclusive and an aggressive approach is desired, consider surgical biopsy and/or removal of the lesion. If a more conservative approach is to be pursued, consider a recheck ultrasound in 1-2 months to assess for progression.
- Regarding the cystic calculus, consider a cystotomy with stone removal, analysis and culture. Alternatively, an attempt at medical dissolution can be initiated. If no improvement in the stone size is seen within 4-6 weeks of initiating therapy, a cystotomy should be revisited.



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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