


**PATIENT PRESENTING CLINICAL SIGNS**

**Keesha Mcquoid** History: Reduced appetite, mobility issues, PUPD. Has been drinking more than normal for 4-5 days. Almost 2 weeks ago she stopped eating.

**SPECIES** Abnormal PE/Chem/CBC/UA Results: ALKP >2000 (N 23-212) ALT 462 (N 10-125) Non regen anemia  
 HCT 28.6 (N 37.3-61.7) USG 1.040, rest U/A WNL

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**
**BREED**

Goldendoodle

**Urinary System**

The urinary bladder wall is 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.

**SEX**

Spayed Female

The left kidney is normal size (6.94 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. The cortex is slightly heterogenous in appearance. A 1.02 cm cortical cyst is observed at the cranial aspect. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

**AGE**

14 years, 4 mos

The right kidney is normal size (7.24 cm in length) with a normal shape, smooth peripheral margins, and normal internal architecture. There is mild to moderate loss of corticomedullary distinction. A hyperechoic medullary band is observed at the corticomedullary junction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

**WEIGHT**

24.85 kg

**Adrenal Glands**

The left adrenal gland is normal size (0.42 cm at cranial pole) (0.43 cm at caudal pole) (2.49 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 (0.76 cm at cranial pole) (0.61 cm at caudal pole) (3.25 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.

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Brian Barnes

**HOSPITAL NAME**

Westview VH

**Spleen**

A 3.40 cm hypoechoic mass is observed at the craniomedial aspect. The lesion causes capsular expansion. In the remainder of the spleen, the margins are curvilinear. Numerous, ill-defined, coalescing, hyperechoic nodules/areas are observed throughout the organ. Splenic vasculature appears normal with no evidence of thrombosis.

**REFERRING VET**

Dr Brian Barnes

**Liver**

The liver is enlarged with swollen/irregular peripheral contours. The parenchyma is isoechoic relative to the spleen. A >12.00 cm isoechoic to slightly heterogenous mass is observed on the right side. An ill-defined cavitated area is observed within the mass. In the remainder of the liver, the parenchyma is slightly mottled in appearance. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

**INVOICE**

11903

**DATE**

11.23.22

The gall bladder caudally displaced due to a large hepatic mass and is moderately distended. The wall is normal in thickness. A scant amount of gravity dependent, echogenic debris is observed within the lumen. The cystic and common bile ducts are normal/not seen.

### ***Gastrointestinal***

The gastric lumen is moderately distended with ingesta. The gastric wall is normal in thickness with a normal layering pattern. The small intestinal lumen is segmentally dilated with chyme. 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 obvious evidence of an obstructive pattern.

### ***Pancreas***

A portion of the pancreas is obscured by the gastric distention. In the visualized portions, no obvious pathology is seen.

### ***Free Abdomen***

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. A 2.09 cm medial iliac lymph node is visualized. The node is slightly rounded and of normal echogenicity.

### ***Other***

A few ringdown lesions are visualized in the thorax.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings**

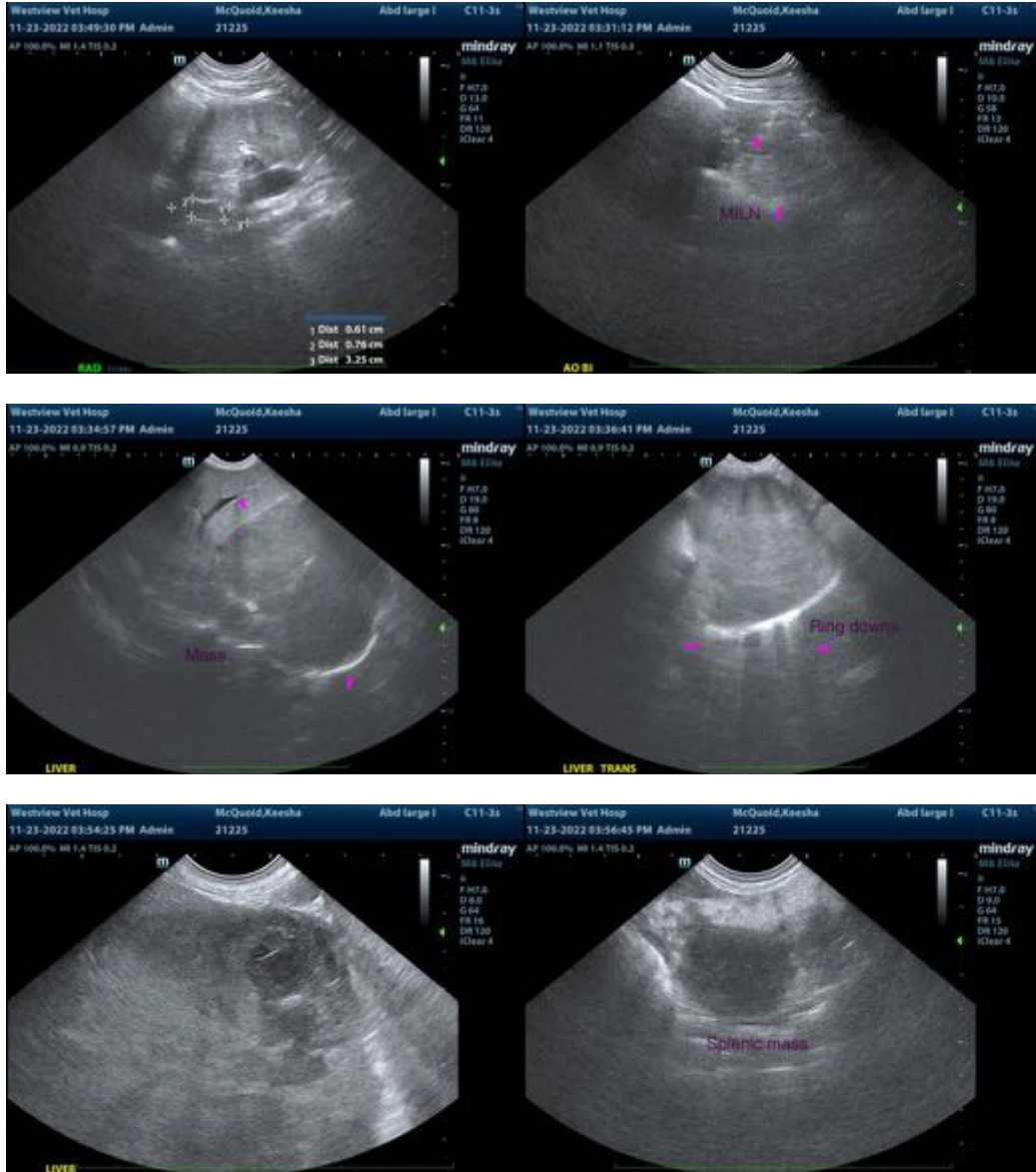
- Large, right hepatic mass effect. Neoplasia (i.e., hemangiosarcoma, round cell tumor, carcinoma) is suspected, with a lower possibility of a benign process.
- Splenic mass. Neoplasia (i.e., sarcoma, round cell tumor). However, a benign myelolipoma cannot be completely excluded. The diffuse hyperechoic lesions throughout the spleen, trend toward the benign (i.e., myelolipomas, lipogranulomas) with a lower possibility of emerging neoplasia.

### **Secondary Findings**

- Bilateral, chronic, age-related renal changes
- The medial iliac lymph node could be consistent with reactive change or emerging neoplasia.
- The suspected ringdown lesions in the thorax are suggestive of pulmonary parenchymal disease.

## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

- Three-view thoracic radiographs are recommended to assess for pulmonary metastases or other lung pathology.
- Consider fine-needle aspirates of the liver and splenic masses if clotting status is appropriate. Care should be taken to avoid the cavitated region in the liver during aspiration. If cytology results are inconclusive, an abdominal exploratory with hepatic mass removal or debulking and a splenectomy can be considered. An abdominal CT scan would be useful in presurgical planning. If surgery is pursued, the client should be warned of the possibility of multiorgan neoplasia and the potential prognosis. If surgery is not pursued, palliative care is recommended.



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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