



**PATIENT PRESENTING CLINICAL SIGNS**

Sakura Takahashi History: Patient presents for elevated liver enzymes and hyposthenuria on Senior lab work. No current meds.  
Abnormal PE/Chem/CBC/UA Results: Urine culture: pending. Chem: AST 99, ALT 373, ALP 502.

**SPECIES**

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

**BREED**

Shiba Inu

The urinary bladder is moderately distended. The wall is normal in thickness. The mucosal surface in the region of the apex is slightly irregular. A scant amount of echogenic debris is observed within the lumen. No cystic calculi are observed. The region of the trigone and visible portion of the proximal urethra are normal.

**SEX**

Spayed Female

The left kidney is not visualized in its entirety. In the visualized portion, the margins are curvilinear. The cortex is isoechoic relative to the spleen and mildly thickened with mild loss corticomedullary distinction. A small cortical cyst is observed at the medial aspect. There is no obvious evidence of pyelectasia, nephroliths, infarcts or hydronephrosis. Renal vasculature appears normal.

**AGE**

13 years

The right kidney is normal in size (4.29 cm in length) with a normal shape, architecture and smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

**WEIGHT**

NP

**Adrenal Glands**

The left adrenal gland is normal in size (0.45 cm at cranial pole) (0.61 cm at caudal pole) (1.66 cm in length) with a normal shape and 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**

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

One still image is available for interpretation. The right adrenal gland is in normal size (0.71 cm at cranial pole) (0.62 cm at caudal pole) (1.43 cm in length) with a normal shape and homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

**IMAGING PERFORMED BY**

Kelly Vazquez

**Spleen**

The spleen is normal in size (1.52 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.

**HOSPITAL NAME**

Animal General on Hudson

**Liver**

The liver is subjectively normal in size with normal curvilinear peripheral contours. The parenchyma is isoechoic to slightly hypoechoic relative to the spleen. A >5.00 cm hypoechoic to heterogenous mass is observed adjacent to the diaphragm, in the region of the right medial lobe. The remaining parenchyma is slightly mottled in appearance. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

**REFERRING VET**

Dr. Stefanie Lang

The gall bladder is moderately distended. The wall is normal in thickness with a few polypoid-like lesions arising from the luminal surface. A moderate amount of hyperechoic, mostly gravity dependent debris/sludge is observed within the lumen. The cystic and common bile ducts are normal/not seen.

**INVOICE**

12266

**Gastrointestinal**

The lumen is not distended. The gastric wall is normal in thickness with a normal layering pattern. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern.

**DATE**

2.22.23

and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. There is no evidence of an obstructive pattern.

### **Pancreas**

The region of the pancreas is isoechoic relative to surrounding omental fat. No obvious parenchymal abnormalities are observed. There is no evidence of regional inflammation or effusion.

### **Free Abdomen**

There is no evidence of free fluid. A 1.03 cm hypoechoic rounded lymph node is observed in the cranial abdomen. Surrounding mesentery is hyperechoic.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings**

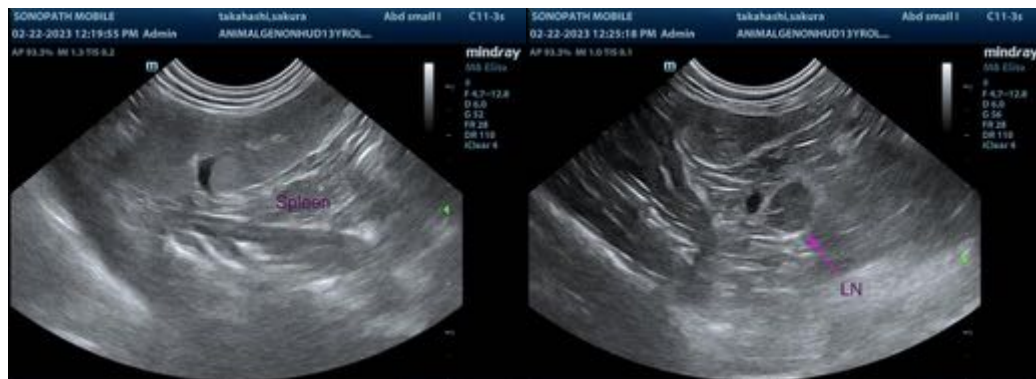
- Hepatic mass, adjacent to the diaphragm. Neoplasia (i.e., adenoma, adenocarcinoma, round cell tumor) is considered likely with a lower possibility of a benign process (i.e., regenerative nodule).
- The prominent cranial abdomen lymph node may represent metastatic disease or reactive change.

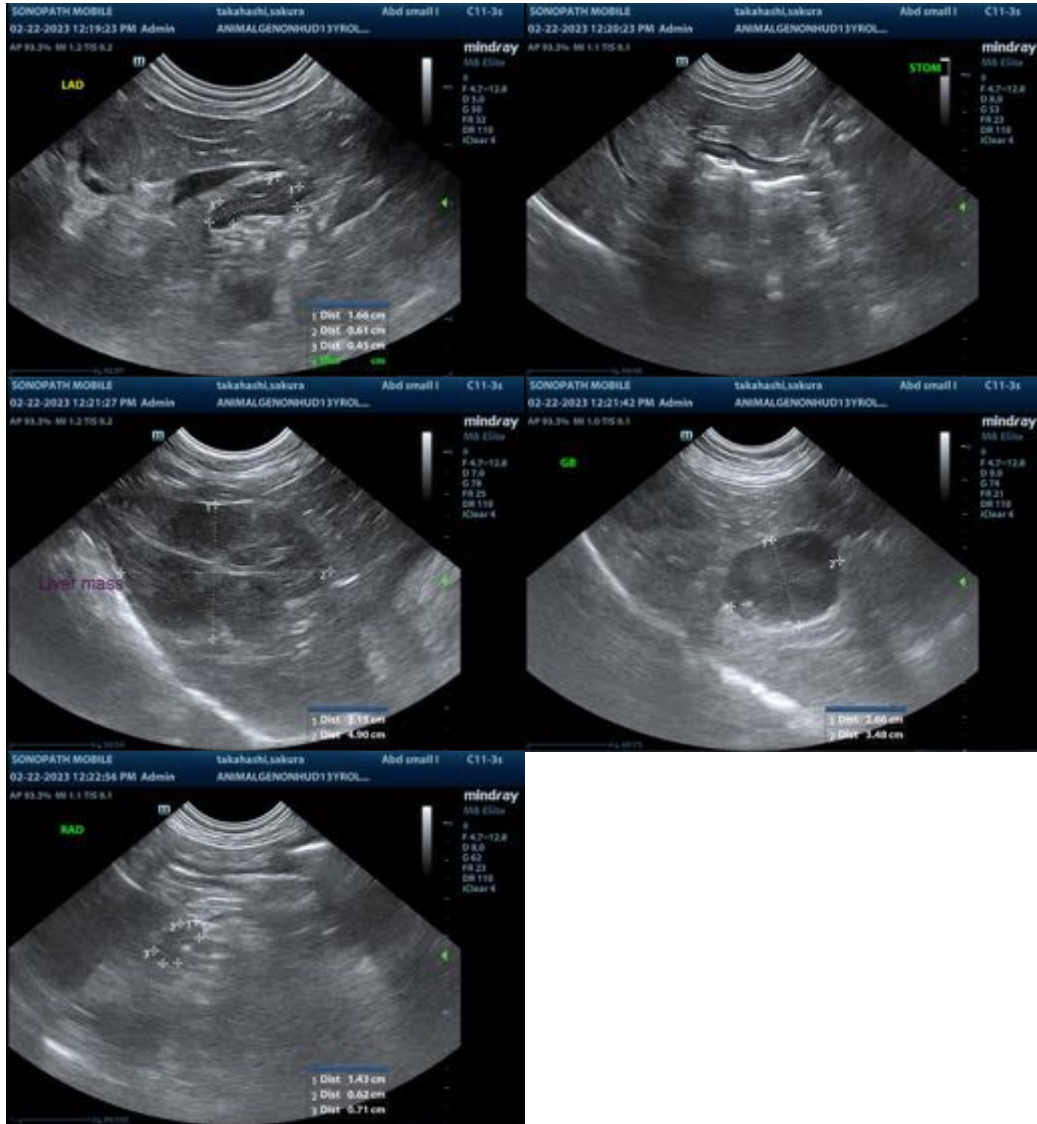
### **Secondary Findings**

- Gall bladder debris/sludge – non-mucocele
- Mild bilateral age-related renal changes

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

- Three-view thoracic radiographs are recommended to assess for pulmonary metastases.
- Consider fine-needle aspirates of the hepatic mass and prominent abdominal lymph node (if accessible, and if clotting status is appropriate). Twenty-five gauge-needles should be used. If the lesions are not accessible or if cytology results are inconclusive, consider excisional biopsy of the hepatic mass and prominent abdominal lymph node. Consultation with a board-certified surgeon is recommended if surgery is pursued. An abdominal CT scan would be useful in presurgical planning.





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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