

**DATE PRESENTING CLINICAL SIGNS**

2/9/2022 History: Presenting Complaint: Referral for Continued Care; Mass/Swelling – Spleen. Date: 02-08-2022  
Referral - seen last week Friday - otitis - started Clavamox and Animax. Sunday owner noted abdomen distended. Uncomfortable - not wanting to walk or move - refusing to eat treats. Seen at rDVM today - X-rays show soft tissue mass cranial abdomen. Assessment: Abdominal Mass Plan: Recommend admit into hospital - BW, IV fluids and supportive care overnight - emergency US tomorrow. Owner declines - has very limited funds-wants to take home and bring back in morning for US. Ok's gabapentin to go home. Owner plans to have BW performed at rDVM.

**PATIENT**

Khloe Linton

**SPECIES**

Canine

**BREED**

Yorkie

**SEX**

Female Intact

**AGE**

2-8-2013

**WEIGHT**

13 Lbs.

**INTERPRETED BY**

Andrea Nicastro, DMV,  
Diplomate DACVIM  
(Small Animal  
Internal Medicine)

**HOSPITAL NAME**

Animal Emergency  
Hospital

**REFERRING VET**

Dr. Saubier

**INVOICE**

10297

**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 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.

The left kidney is normal size (5.19 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild to moderate loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

The right kidney is normal size (5.54 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild to moderate loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

**Adrenal Glands**

The left adrenal gland is upper limits of normal size (0.69 cm at cranial pole) (0.56 cm at caudal pole) (2.30 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 mildly enlarged (0.61 cm at cranial pole) (0.60 cm at caudal pole) (2.00 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 (0.76 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 enlarged with irregular peripheral contours. A >9 cm mass effect comprised of smaller coalescing heterogenous masses is arising predominantly from the left side and caudal aspect. The mesentery effacing the serosal surface in this region is hyperechoic. More normal-appearing hepatic parenchyma is observed on the right side. Hepatic vasculature and intrahepatic biliary tracts appear to be of normal volume with no evidence of congestion.

The gall bladder lumen is moderately distended. The wall is thin and smooth. Luminal contents are anechoic. The cystic and common bile ducts are normal.

### **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 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 or overt infiltrative disease is noted.

### **Pancreas**

The pancreas is largely obscured by the large hepatic mass effect. In the visualized portion, the parenchyma appears mottled. The pancreatic duct is not overtly dilated.

### **Free Abdomen**

There is no evidence of free fluid. The abdominal lymph nodes are normal/not visible.

### **Other**

The left ovary is prominent in size (1.84 x 1.01); with several cystic areas. The right ovary is subjectively normal in size (1.16 x 0.60 cm); with a normal shape and homogenous parenchyma. The uterine body is visible and is normal in size (0.49 cm in width). No obvious pathology is observed.

A brief echocardiogram reveals no evidence of pericardial effusion or obvious right atrial/auricular mass.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings**

- Left hepatic mass effect. Neoplasia (i.e, adenocarcinoma, adenoma), is considered likely, with a lower possibility of benign pathology. Regional peritonitis is present.

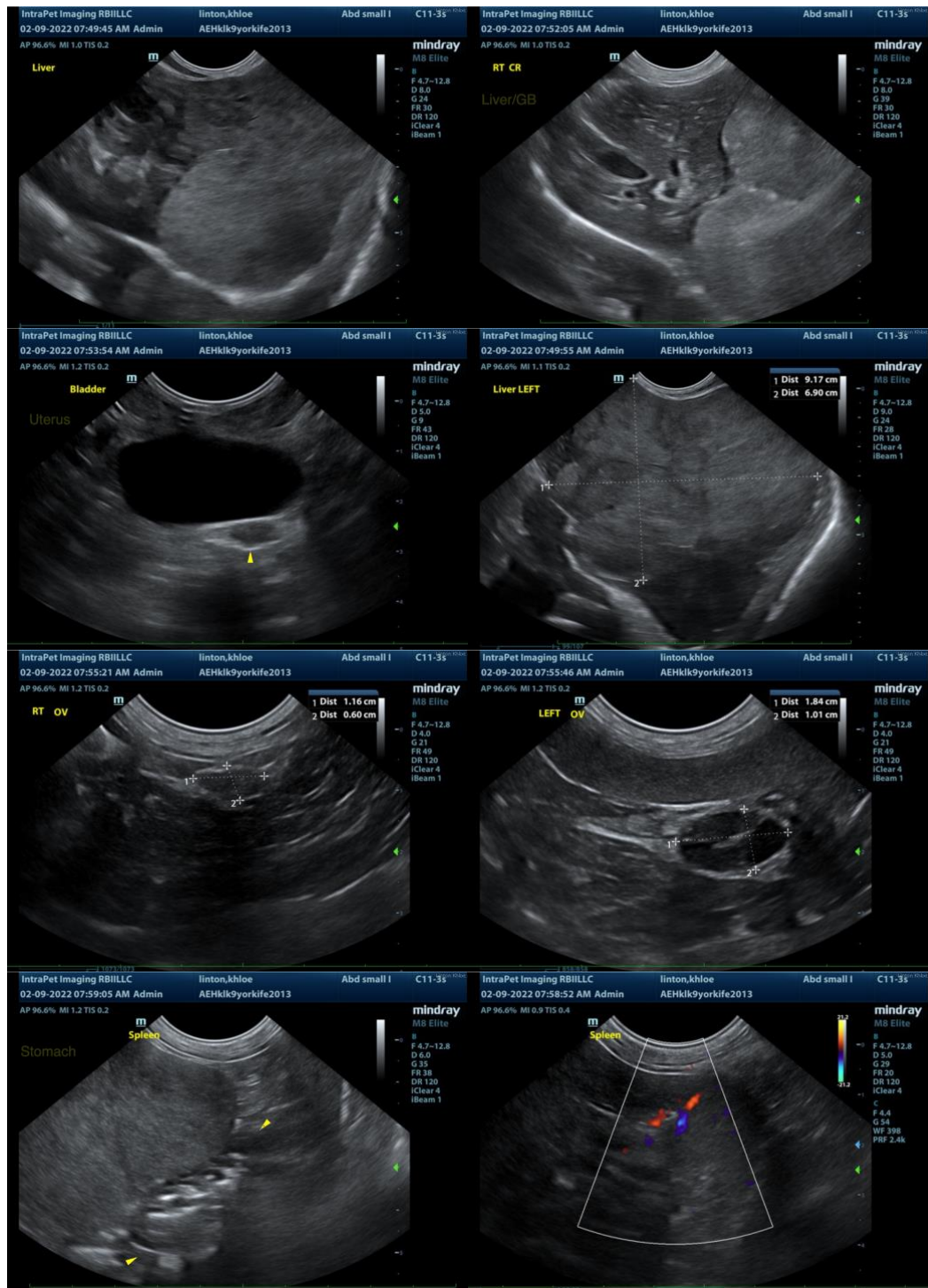
### **Secondary Findings**

- Degenerative, age-related renal changes.
- Mild right adrenomegaly.
- Age-related pancreatic remodeling
- Cystic left ovary.

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

- Three-view thoracic radiographs are recommended to assess for pulmonary metastases.
- If an aggressive approach is desired, consider a consultation with a board-certified surgeon to discuss hepatic mass removal or debulking. If surgery is to be, an abdominal CT scan is

recommended for presurgical planning. If surgery is not to be 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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