

**DATE PRESENTING CLINICAL SIGNS**

3/16/23 Hx of acute excessive drooling. Radiographs showed atypical area in near the rostral pole of the left kidney concerning for a mass effect.

**PATIENT**

Charlotte Marsh

Current Medications: Provable.

Lab Results: See attached.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Rachel Brillhart, RDMS.

**SPECIES**

Canine

**BREED**

English Bulldog

**SEX**

Spayed Female

**AGE**

9/9/12

**WEIGHT**

57 Pounds

**INTERPRETED BY**

Kathleen Sennello DVM,  
MS, Diplomate ACVIM  
(Small Animal Internal  
Medicine)

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****Urinary System**

The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

The left kidney has a normal shape and size (6.19 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (6.2 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**Adrenal Glands**

The left adrenal gland is normal in size measuring 0.79 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

The right adrenal gland is normal in size measuring 0.77 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

**Spleen**

The spleen is subjectively normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

**Liver**

The liver is large in size, hypoechoic, and slightly irregular in shape. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. In the caudoventral aspect of the liver, there is an iso- to slightly hyperechoic, ill-defined mass effect/rounded liver lobe measuring 5.3 cm x 2.52 cm. Additionally, there is a small hyperechoic parenchymal nodule measuring 1.12 cm in diameter.

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are mild and primarily anechoic. The cystic and common bile ducts are normal/not visible.

**HOSPITAL NAME**

Bayside AMC

**REFERRING VET**

Dr. Buchanan

**INVOICE**

45970

### ***Gastrointestinal***

There is a focal area of shadowing material visualized within the stomach measuring approximately 3.42 cm in diameter. This could be consistent with ingested foreign material, hard shadowing ingesta, etc. Additionally, the stomach wall in this area appears slightly prominent, measuring at 0.54 cm with some variability due to the presence of rugal folds. Wall layering remains intact and there is no impression of reduced peristaltic activity. No focal mass lesions observed. Correlate with abdominal radiographs for the possibility of a gastric foreign body.

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. The duodenum measured as normal (between 0.3-0.5cm in wall thickness) and the jejunum measured as normal (between 0.2-0.47cm.) Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

### ***Pancreas***

The pancreas is prominent and mottled compared to the surrounding isoechoic mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

### ***Free Abdomen***

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

## **PRIMARY FINDINGS**

- Shadowing material visualized within the gastric lumen – Correlate with the feeding history and abdominal radiographs. If the patient was adequately fasted consider such differentials as delayed gastric emptying, a partial outflow tract obstruction (none seen) or ingested foreign material.
- Heterogeneous liver with an iso- to slightly hyperechoic ill-defined mass effect and hyperechoic nodule – The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy. Additionally, there is a somewhat isoechoic mass effect in the caudoventral aspect of the liver. This would be most consistent with a benign primary liver mass, but other differentials are possible. Recommend a fine needle aspirate. The appearance of the small hyperechoic nodule is most consistent with a benign lesion. Recommend continued monitoring.

## **SECONDARY FINDINGS**

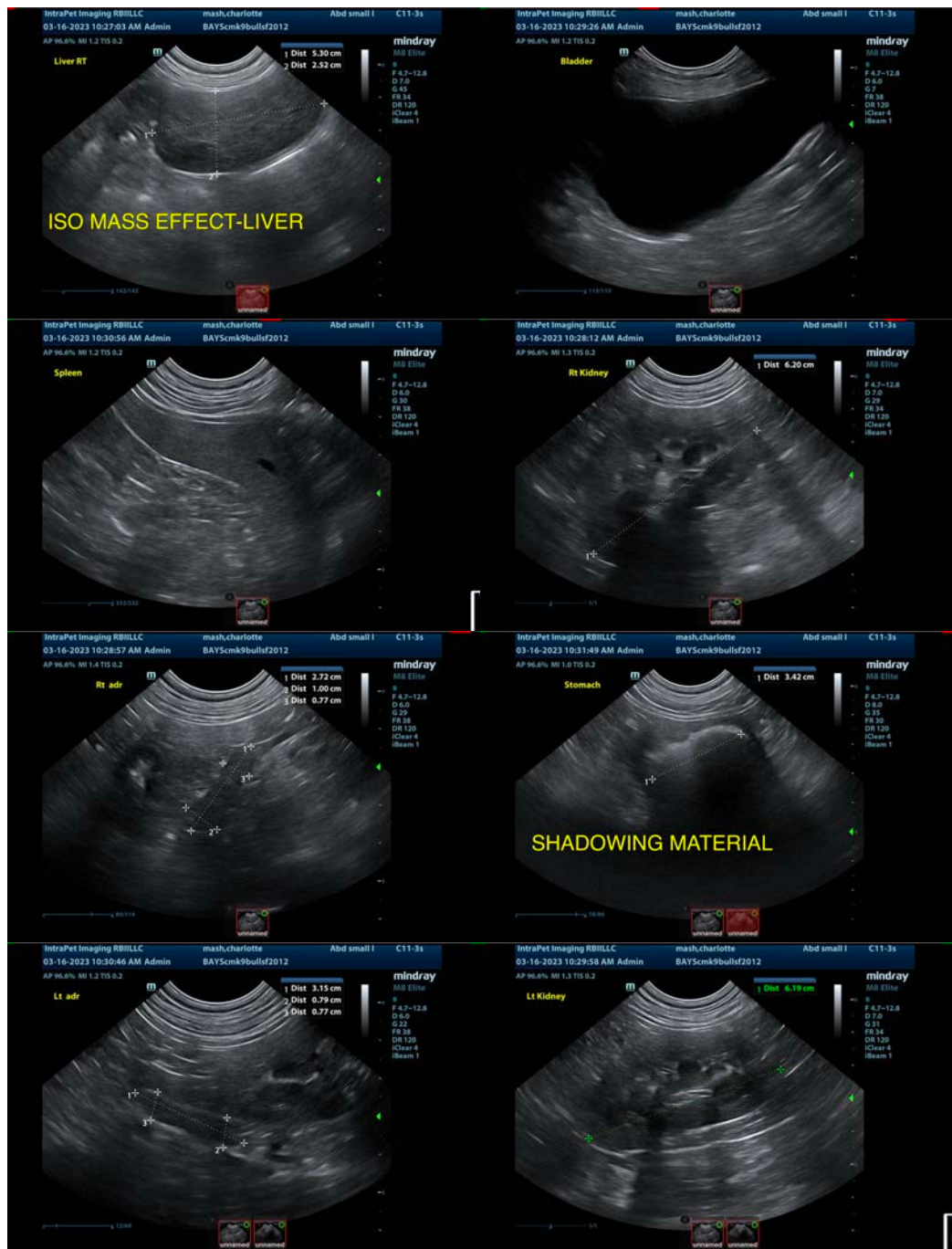
- Prominent, mottled pancreas – The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

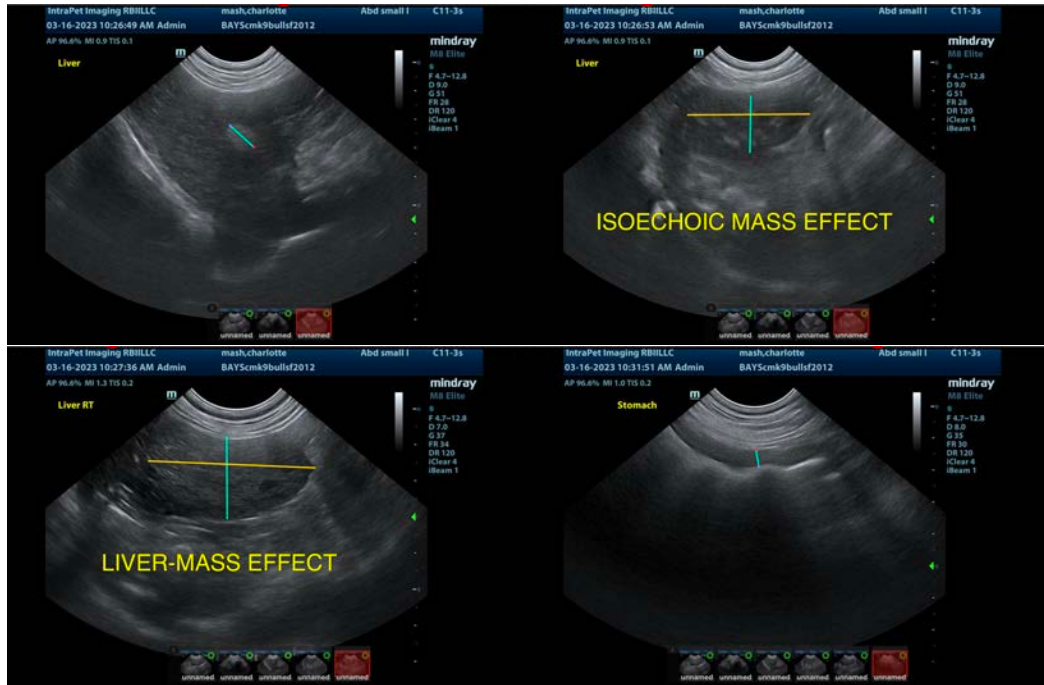
## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

There is a focal area of shadowing material visualized in the gastric lumen. Correlate this with the feeding history and abdominal radiographs, as this could be consistent with gastric foreign material.

Additionally, there is an iso- to slightly hyperechoic, rounded mass effect in the liver. This could be consistent with a benign hepatic mass lesion (hepatoma, a hyperplastic nodule, carcinoma, other). Recommend a fine needle aspirate and continued monitoring. If surgical removal is desired, I feel this would be a good candidate, and you could consider a preoperative contrast CT scan for further evaluation.

Recommend three view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement.





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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)  
kathleen.sennello@sonopath.com