


PATIENT PRESENTING CLINICAL SIGNS

Ruby Bentall
 History: concerned about elevated liver values, poss biliary duct obstruction currently on ursodiol, eventi liver
 Abnormal PE/Chem/CBC/UA Results: elevated phosph, alb, chol, Alt, GGT Tbil, Plt, neutrophilia

SPECIES

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN
Urinary System
BREED

Boston Terrier

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is mildly 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

Female, spayed

The left kidney is normal size (4.78 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

AGE

13 yrs.

The right kidney is normal size (4.96 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

WEIGHT

21 lbs.

Adrenal Glands

The left adrenal gland is normal size (0.78 cm at cranial pole) (0.59 cm at caudal pole) (1.94 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

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

The right adrenal gland is normal size (0.46 cm at cranial pole) (0.59 cm at caudal pole) (2.03 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.

IMAGING PERFORMED BY

Kelly Reshny, RVT

Spleen

The spleen is normal in size (1.01 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

St. Catherines AH

Liver

The liver is subjectively normal in size with normal contours and structure. There is appropriate echogenicity and echotexture. No overt structural evidence of inflammatory, infiltrative or regenerative pathology is evident. Vascular and biliary tracts are of normal volume with no evidence of congestion. No pathological hepatic lymphadenopathy observed. The gall bladder lumen is moderately distended. The wall is thin and smooth. A small amount of aggregated echogenic mostly gravity-dependent debris is observed within the lumen. The cystic and common bile ducts are normal/not seen.

REFERRING VET

Dr. Masoud

INVOICE

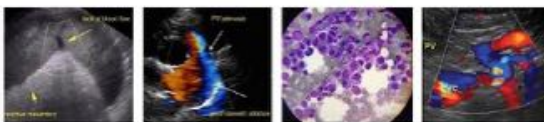
11977

Gastrointestinal

The gastric lumen is mildly distended with ingesta. 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

DATE

8/31/21



PATIENT

Ruby Bentall

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. No obstructive disease is noted.

SPECIES

Canine

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.

BREED

Boston Terrier

Free Abdomen

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

SEX

Female, spayed

ULTRASONOGRAPHIC FINDINGS

AGE

13 yrs.

Primary Findings:

- An obvious cause for the elevated liver enzymes is not identified in the study. However, a microscopic hepatopathy (i.e., bacterial cholangiohepatitis, Leptospirosis, chronic active hepatitis, copper-associated hepatotoxicity, infiltrative neoplasia (less likely)) cannot be excluded.

WEIGHT

21 lbs.

Secondary Findings:

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

INTERPRETED BY

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

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

**IMAGING
PERFORMED BY**

Kelly Reshny, RVT

- Leptospirosis testing including blood and urine PCR, serology is recommended.
- Consider pre- and post-prandial serum bile acids, particularly if the total bilirubin is <1.5.
- Cytologic evaluation of the liver should be considered in this patient if clotting status is appropriate. A fine needle aspirate using a 25-gauge needle is recommended. If cytologic evaluation is inconclusive, consider a surgical liver biopsy with aerobic and anaerobic bile cultures and acquisition of additional hepatic tissue samples for copper quantitation.
- If a conservative approach is desired, consider empirical treatment for bacterial cholangiohepatitis (amoxicillin-clavulanic acid, Denamarin Advanced). If no improvement in the liver values is seen within 7-10 days of initiating therapy, antibiotics should be discontinued and hepatic tissue sampling reconsidered. If liver values improve, continue therapy for at least 4-6 weeks and 1 week beyond normalization of the liver values.

HOSPITAL NAME

St. Catherines AH

REFERRING VET

Dr. Masoud

INVOICE

11977

DATE

8/31/21



PATIENT

Ruby Bentall

SPECIES

Canine

BREED

Boston Terrier

SEX

Female, spayed

AGE

13 yrs.

WEIGHT

21 lbs.

INTERPRETED BY

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

**IMAGING
PERFORMED BY**

Kelly Reshny, RVT

HOSPITAL NAME

St. Catherines AH

REFERRING VET

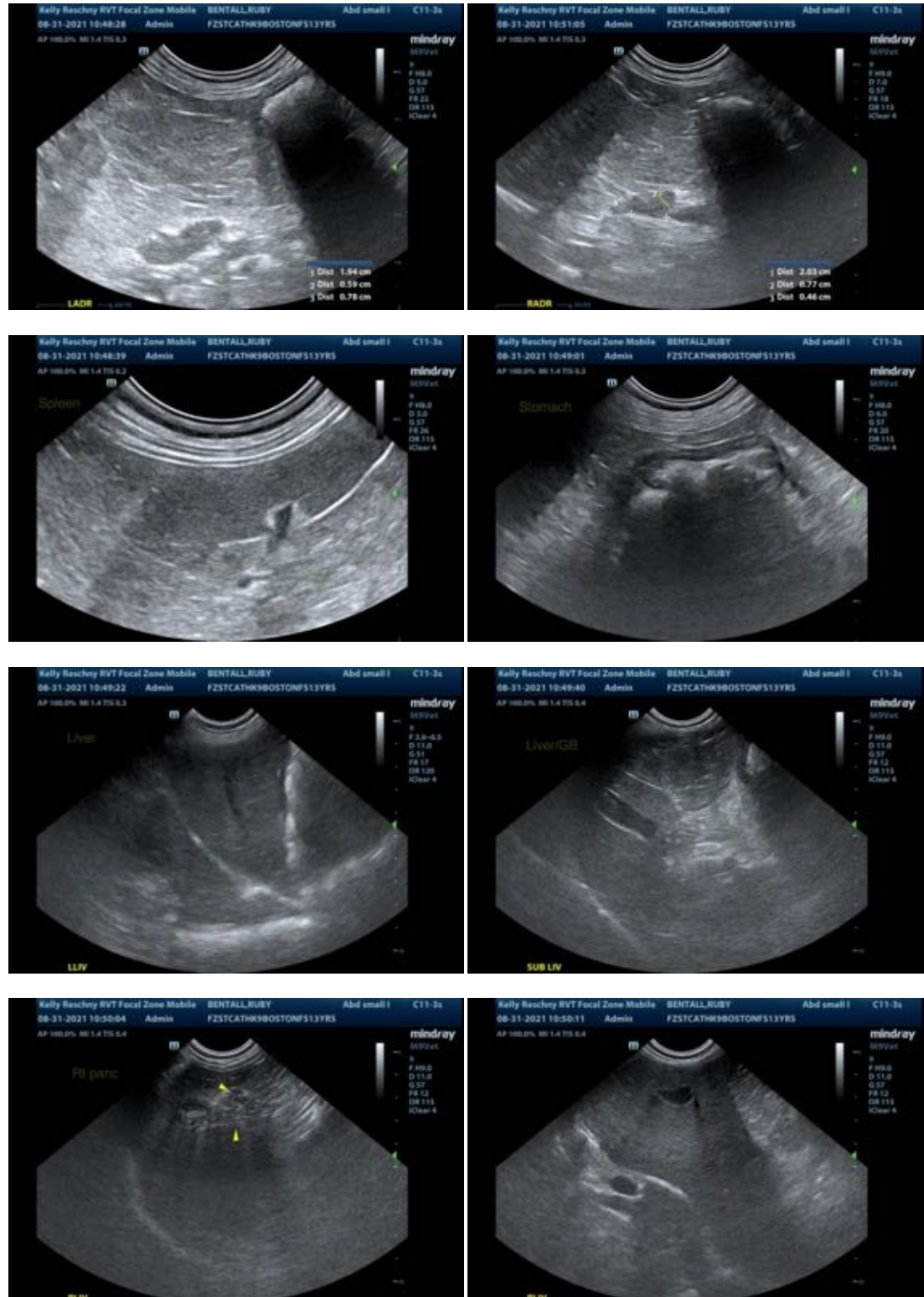
Dr. Masoud

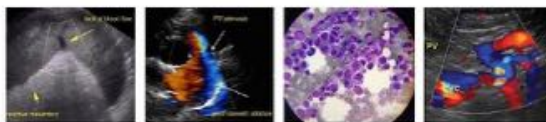
INVOICE

11977

DATE

8/31/21





PATIENT

Ruby Bentall

SPECIES

Canine

BREED

Boston Terrier

SEX

Female, spayed

AGE

13 yrs.

WEIGHT

21 lbs.

INTERPRETED BY

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

**IMAGING
PERFORMED BY**

Kelly Reshny, RVT

HOSPITAL NAME

St. Catherines AH

REFERRING VET

Dr. Masoud

INVOICE

11977

DATE

8/31/21



The information and recommendations provided are based on the images presented by the referring veterinarian. 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.

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

Andrea.nicastro@sonopath.com