



PATIENT PRESENTING CLINICAL SIGNS

Sophia Lowman 11 year old FS Boston Terrier with severely elevated ALP, currently being treated with benazepril. Lost ~1 lb in last few months. Significantly elevated urine protein and UPC as well - see below. At home same amount of urination and drinking as always has - does drink more than owners other dog and asks to go out to urinate every 4-6 hours at home (goes out twice during the night every night). Discussed LDDS and bile acids as potential next steps. 2/18/22 - alp 2636, USG 1030, Pro 3+, pH 8.5, UPC 1.5, Blood pressure 168 11/23/21 USG 1037, pH 8.5, pro 3+ UPC 1.5 - benazepril 5 mg increased to 1.5 tab q12hr, Blood pressure 176 10/26/21 alp 1459, cpk 1159, usg 1033, pH 8.5, pro 3+, UPC 1.4 - benazepril 5mg started at 1.5 once per day, blood pressure 180 11/19/20 - LDDS - <0.2 for 4 hr and 8 hr 11/2/20 alp 585

Abnormal PE/Chem/CBC/UA Results: 2/18/22 - alp 2636, USG 1030, Pro 3+, pH 8.5, UPC 1.5, Blood pressure 168 11/23/21 USG 1037, pH 8.5, pro 3+ UPC 1.5 - benazepril 5 mg increased to 1.5 tab q12hr, Blood pressure 176 10/26/21 alp 1459, cpk 1159, usg 1033, pH 8.5, pro 3+, UPC 1.4 - benazepril 5mg started at 1.5 once per day, blood pressure 180 11/19/20 - LDDS - <0.2 for 4 hr and 8 hr 11/2/20 alp 585

Canine

Breed Boston Terrier

SEX Spayed Female

AGE ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

11 years Urinary System

WEIGHT 29.7 lbs

The **urinary bladder**, trigone, and pelvic urethra presented normal thicknesses and normal tone. The pelvic urethra was imaged 2.0 cm beyond the cystourethral junction. The ureters were not visible which is normal. No uroliths or sediment were visualized and anechoic urine was present. No evidence of inflammatory or neoplastic changes was noted. Ureteral papillae were normal.

INTERPRETED BY Eric Lindquist, DMV DABVP, Cert. IVUSS

The **kidneys** revealed largely normal size and structure, corticomedullary definition and ratio (cortex 1/3 of medulla) were essentially maintained with some age-related loss of curvilinear patterns regarding the capsule and C/M junction. The cortices presented largely uniform texture with some increased echogenicity expected for this age patient. Medullary structure differed distinctly from that of the cortex and no evidence of pelvic dilation was present. The right kidney measured 5.06 cm. The left kidney measured 4.92 cm.

IMAGING PERFORMED BY Hadley Harris

Adrenal Glands

HOSPITAL NAME TotalBond VS

Both **adrenal glands** were visualized and recognized as having normal shape, size, position and echogenicity for this breed. The phrenic vasculature, glandular echogenicity and detail were unremarkable. Capsule, cortex, and medullary definition were normal for this age patient. The left adrenal gland measured 0.6 cm. The right adrenal gland measured 0.5 cm.

REFERRING VET Dr. Schanche

Spleen

INVOICE

The **spleen** presented a smooth homogeneous parenchyma hyperechoic to liver and renal cortical parenchyma. The capsule was smooth without noticeable expansion or deviation from within the spleen or adjacent pathology. The splenic vasculature demonstrated normal volume without signs of congestion or thrombosis. No sonographic evidence of acute or chronic inflammatory, neoplastic, or infarctual changes was noted.

DATE 2/25/22



PATIENT

Sophia Lowman

Liver

SPECIES

Canine

BREED

Boston Terrier

Exam of the cranial abdomen demonstrated excessive **liver** size and swollen contour. Mild, coarse architecture was noted with increased portal markings and minor parenchymal remodeling is suggestive of an inflammatory component. Minor excessive GB debris was noted with the presence gall bladder dilation and precipitate without the overt formation of mucocele but this may be an issue in the future. This type of liver presentation typically is associated with slow and gradual SAP elevations with low-grade ALT rise. USG-FNA sampling is encouraged if more aggressive LE profiles are present such as ALT > 200 or rapid rise in SAP. These presentations are usually reactive hepatopathies owing to other disease processes either endocrine (Diabetes, Hypothyroidism, Cushing's disease), "antigen surveillance" from the gut/pancreas, or idiopathic breed predisposed progressions.

SEX

Spayed Female

Gastrointestinal

AGE

11 years

Examination of the **gastrointestinal tract** revealed a stomach and intestine free of stasis, of normal wall thickness, acceptable curvilinear mural detail, and peristaltic activity. Small and large intestine demonstrated normal luminal chyme and stool consistency respectively. No obstructive or overt infiltrative disease was noted. No associated abnormal lymphatic activity was noted.

WEIGHT

29.7 lbs

Pancreas

The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Pancreatic duct and capsular contour were acceptably normal and parenchyma respected normal curvilinear patterns. No overt evidence of active inflammatory or neoplastic disease was noted.

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

ULTRASONOGRAPHIC FINDINGS

IMAGING PERFORMED BY

Hadley Harris

Structurally unremarkable abdomen.

Non-specific, minor, degenerative renal changes.

Benign hepatopathy.

HOSPITAL NAME

TotalBond VS

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

REFERRING VET

Dr. Schanche

The changes are normal for this age patient. No overt primary cause of the proteinuria. FNA of the liver could be considered for further definition. However, this is a common finding in this breed at this age.

INVOICE

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BREED

Boston Terrier

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Spayed Female

AGE

11 years

WEIGHT

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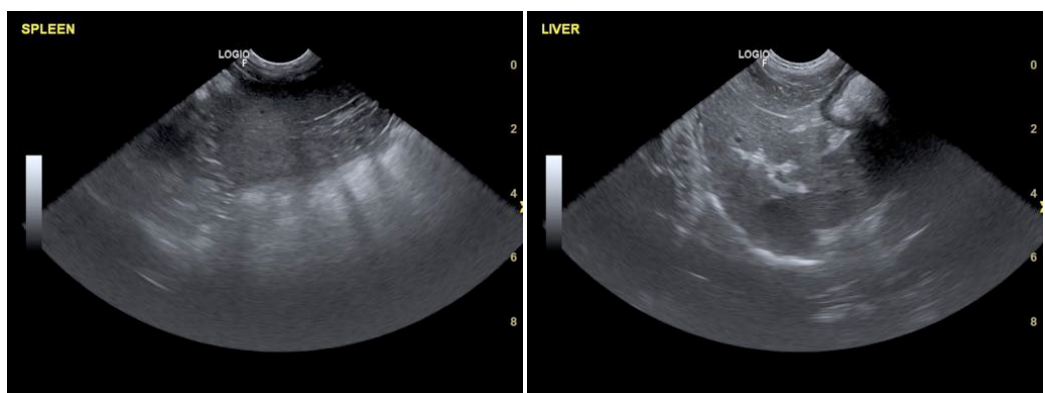
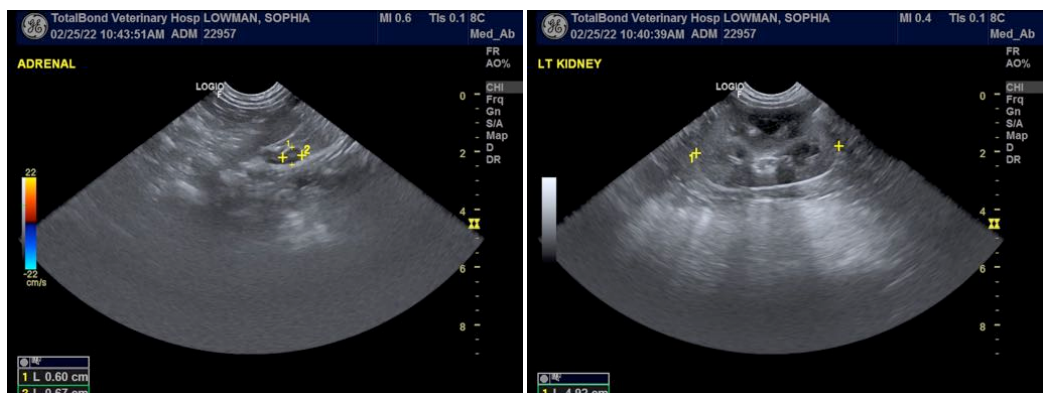
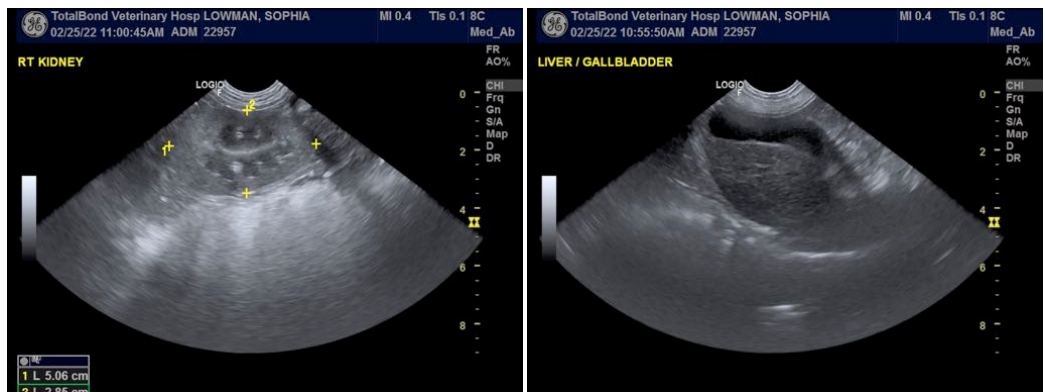
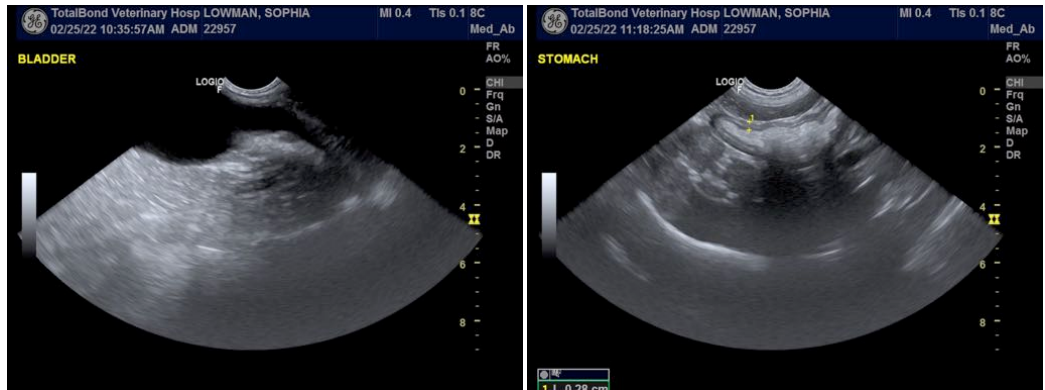
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Sophia Lowman

SPECIES

Canine

BREED

Boston Terrier

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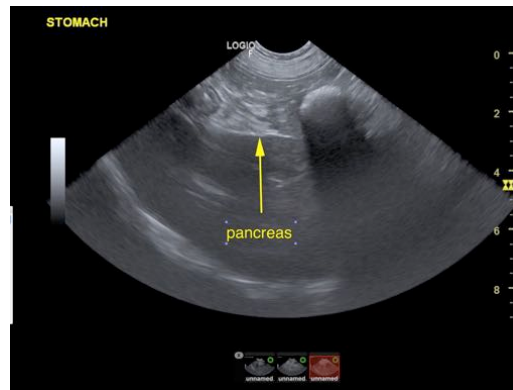
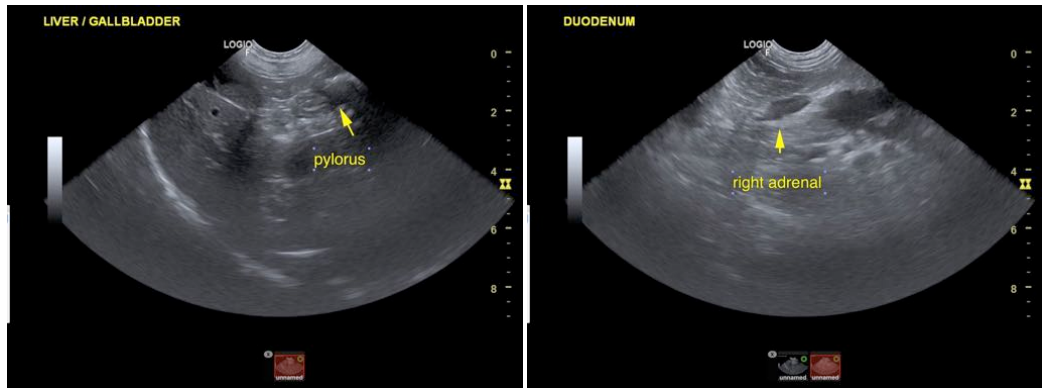
Spayed Female

AGE

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WEIGHT

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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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