



## PATIENT

Pippin Brophy

## SPECIES

Canine

## BREED

Shih Tzu

## SEX

MN

## AGE

15 yo

## WEIGHT

17 lbs.

## INTERPRETED BY

R. McKenzie Daniel,  
DVM, DABVP  
(Canine and Feline)

## IMAGING PERFORMED BY

Desen Ertunc, DVM

## HOSPITAL NAME

Humboldt  
Veterinary Medical  
Group

## REFERRING VET

Kris Flores, DVM

## INVOICE

10860

## DATE

5/5/26

## PRESENTING CLINICAL SIGNS

Few month history of decreased appetite, occasional vomiting.  
Ddx include neoplasia, pancreatitis, Addison's, other

Abnormal PE/Chem/CBC/UA Results: Abnormal PE: PE largely unremarkable, mild muscle wasting, but BCS normal. \*Abnormal CBC/Chem/UA/rads (& date obtained): 4/13/26: cPL 400 (0-200), globulin 5.0 (2.5-4.5), ALP 300 (23-212), Calcium normal 11.9. Potassium normal 4/27/26 : cPL 270 (0-200) Mild leukocytosis with mild neutrophilia, WBC 20 (5-17), neutrophils 15 (3-11). Normal potassium. Globulin 5.0 (2.5-4.5), ALP 300 (23-212), calcium 12.3 (7.9-12.0) 4/29/26 showed mildly increased potassium 5.4 (3.3-4.9). Ionized calcium mildly elevated to 1.58 (1.21-1.45). WBC was not done on 4/29/26

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### *Urinary System*

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 3.0 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with no uroliths or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes were noted.

The area of the residual prostate appeared normal and free of pathology.

No evidence of pathology in the area of the aortic trifurcation.

Normal renal size with asymmetrical margination was present in both kidneys. The renal cortex presented uniformly increased in echogenicity with uniform echotexture. The renal cortex appeared to be hypertrophied resulting in an altered cortex: medulla ratio. Moderate to significant loss of corticomedullary distinction was also present with hyperechoic corticomedullary to medullary parenchyma echogenicity. Mild bilateral pyelectasia was noted with medullary mineral. The left kidney measured 4.4 cm in length. The right kidney measured 4.6 cm in length.

### *Adrenal Glands*

The bilateral adrenal glands were asymmetrically enlarged in size. Mild parenchyma heterogeneity and mild capsule asymmetry was present without suspicion for overt neoplasia. The left adrenal gland measured 0.78 cm width in the caudal pole and 0.74 cm width in the cranial pole. The right adrenal gland measured 0.70 cm width in the caudal pole and 1.2 cm width in the cranial pole.

### *Spleen*

The spleen exhibited at least two visualized expansive nonhomogeneous hypoechoic nodules with mild associated splenic capsule distortion. There is no evidence of capsular escape. An example of a splenic nodule measured 1.7 cm in diameter.

### *Liver/ Gallbladder*

The liver was subjectively normal in size, structure, and contour. The liver parenchyma was nonuniform and hypoechoic to the spleen with a mild coarse echotexture and subjective mild to benign parenchymal remodeling. The hepatic and portal vasculature were normal in appearance without signs of congestion.



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The gallbladder was non-distended in size containing primarily anechoic content with moderate, nonorganized, congealed, hyperechoic gallbladder debris. The cystic and common bile ducts were normal.

### *Gastrointestinal*

The stomach presented mild to variably thickened wall exhibiting decreased mural echogenicity and indistinct to loss of gastric wall layer detail. The gastric lumen was empty with mild lumen gas. Thickened stomach wall measured up to 0.86 cm.

The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of ileus, obstruction, or foreign material.

Normal visible colon wall layers were present with formed feces in lumen.

### *Pancreas*

The pancreas was normal in size with mild asymmetrical contour and heterogeneous remodeled parenchyma with indistinct nodular changes. Normal appearing peripancreatic omentum was noted without evidence of active pancreatic inflammation, overt neoplasia, or peripancreatic omental reactivity.

### *Free Abdomen*

No overt lymphadenopathy or peritoneal effusion was present.

## ULTRASONOGRAPHIC FINDINGS

- Empty stomach with variably thickened wall including indistinct to loss of mural detail
- Sonographically normal small intestine
- Heterogeneous remodeled indistinctly nodular pancreas
- Expansive splenic nodules
- Mild hepatic parenchymal remodeling with nonorganized congealed gallbladder debris – not consistent with mature mucocele
- Bilateral mildly enlarged nonhomogeneous adrenal glands
- Bilateral chronic degenerative kidneys with mild pyelectasia

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Although sampling is required for further clarification, gastric and splenic neoplasia are of primary concern with gastritis, splenic nodular hyperplasia, hematopoiesis, or other benign etiologies thought less likely. Assuming normal clotting status and using a 25-gauge needle, splenic nodule FNA cytology is warranted for further clarification.

Chronic pancreatitis with remodeling and indistinct nodular changes, which may suggest indistinct nodular hyperplasia, may be suspected if evidence of cranial abdomen or subxiphoid discomfort on palpation, in conjunction with cPL, without evidence of active pancreatitis and with pancreatic neoplasia thought less likely.

Adrenal screening could be considered if clinical signs consistent with adrenal disease are present. Gastroprotectants with possible canned novel protein or hydrolyzed diet trial and hepatic support with

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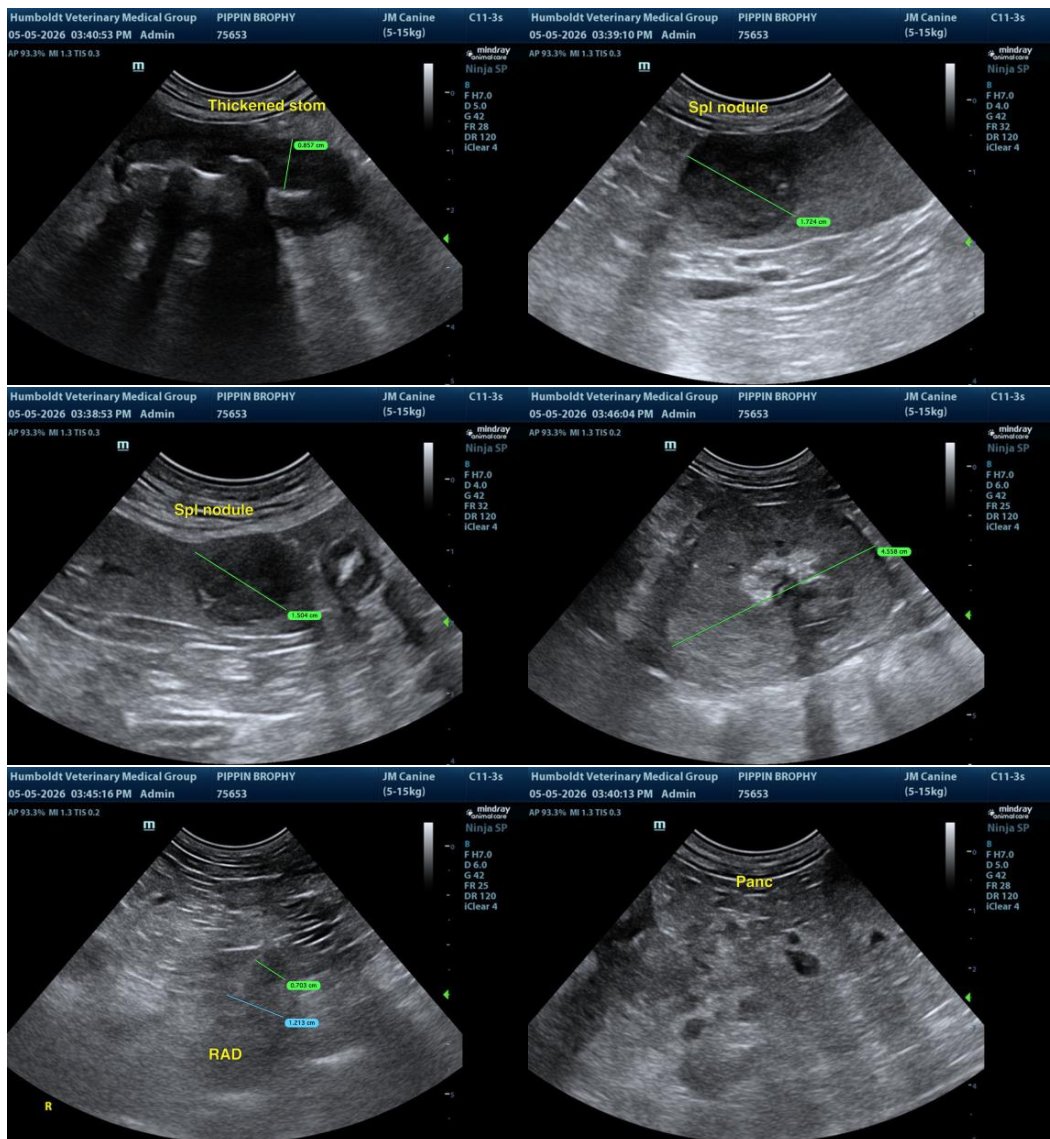
## INVOICE

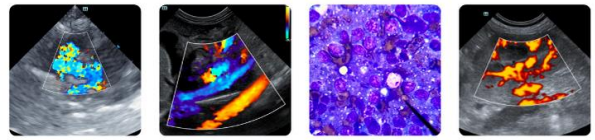
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clinical monitoring would be a more conservative approach. Correlation with urinary workup is recommended.





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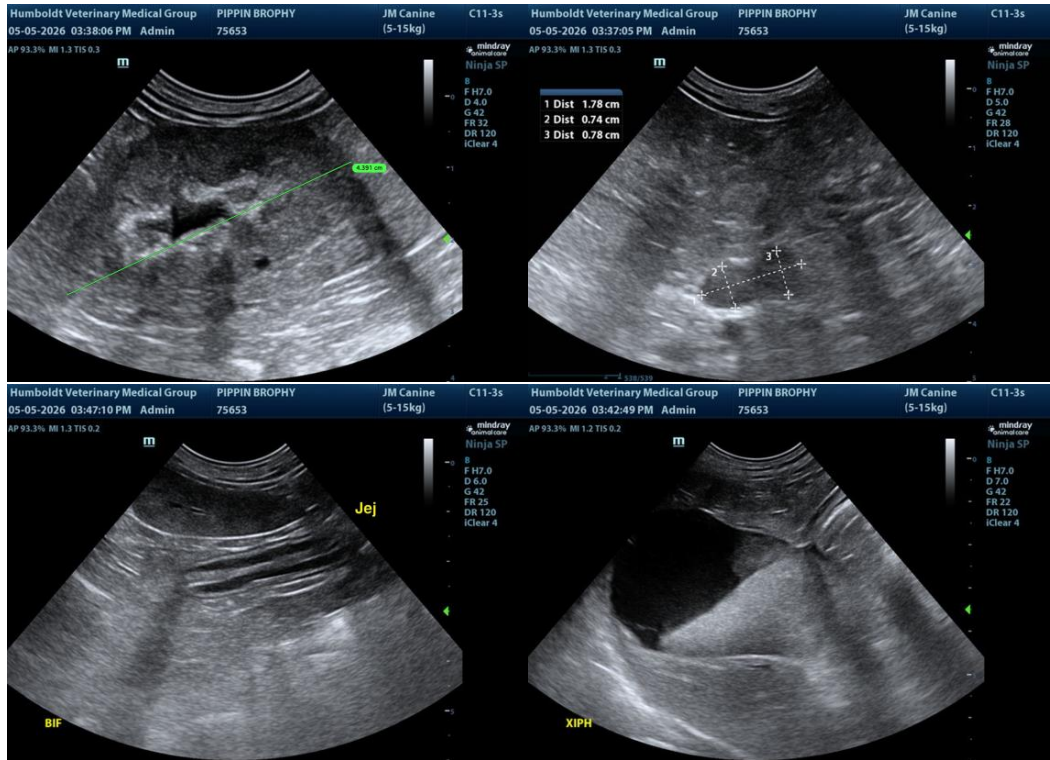
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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