



## PATIENT PRESENTING CLINICAL SIGNS

Applesauce Cave

## SPECIES

Canine

## BREED

French Bulldog

## SEX

Spayed Female

## AGE

12 Years

## WEIGHT

22 Pounds

## INTERPRETED BY

Eric Lindquist, DMV

DABVP, Cert. IVUSS

## IMAGING PERFORMED BY

Jenna Walsh, CVT

## HOSPITAL NAME

Countryside AC

## REFERRING VET

Dr. Cox

## INVOICE

36092

## DATE

3/10/22

Recheck AUS (last done early February via Animal Sounds NW). Following previous ultrasound and recheck labwork (worsened liver enzymes) recommended consult with Oregon Veterinary Referral Associates for possible endoscopy, exploratory surgery. PT only had a telemedicine consult. It was recommend that owner continue on Denamarin then recheck ultrasound in a month. During this last month owner reports pt has been doing well but she has been having bouts of regurgitation which owner feels is responsive to Cerenia. However pt was staying with a pet sitter recently and they began feeding her small amounts every 2 hours to avoid regurgitation and have not had to u the Cerenia. Pt has maintained her weight. Clearly it sound like there is some gastric outflow obstruction...

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### Urinary System

The **urinary bladder**, trigone, and pelvic urethra presented normal thicknesses and normal tone. 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 were noted. Ureteral papillae were normal.

The **kidneys** revealed normal size and structure, corticomedullary definition and ratio for this age. The cortices presented largely uniform texture with normal echogenic relationship to liver and spleen. Medullary structure differed distinctly from the cortex and no evidence of pelvic dilation was present. The capsules were acceptably uniform without significant irregularities. The left kidney measured 4.18 cm. The right kidney measured 4.53 cm.

### Adrenal Glands

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 right adrenal gland measured 1.79 cm x 1.22 cm at the cranial pole and 0.70 cm at the caudal pole. The left adrenal gland measured 1.92 cm x 0.47 cm at the cranial pole and 0.67 cm at the caudal pole.

### Spleen

The **spleen** was mildly heterogeneous, but stable.

### Liver

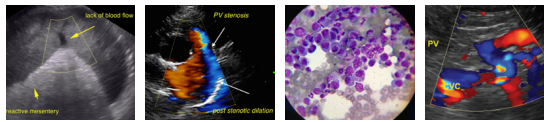
The **liver** images submitted revealed subjectively normal liver size, contour, and structure. Parenchymal echogenicity was naturally coarse and hypoechoic to the spleen. Vascular and biliary tracts were of normal volume with no evidence of congestion. The gallbladder was overdistended with suspended debris and striating bile. A minor amount of biliary sand noted, consistent with emerging mucocele.

### Gastrointestinal

The **stomach** was empty and unremarkable. The small intestine and colon were unremarkable. Curvilinear patterns were maintained.

### Pancreas

The caudal left limb of the **pancreas** revealed a 1.53 cm x 1.17 cm hypoechoic nodule. The remainder of the pancreas was unremarkable. The nodule appeared to be adhered to the spleen, yet appears to



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derive from the pancreas. Patchy, mixed hypoechoic nodular changes noted in the pancreas. The largest nodule measured approximately 2.0-2.5 cm with remodeled omentum. The pathology enveloped the upper duodenum. Some level of adhesions likely. However, no evidence of delayed outflow present.

**ULTRASONOGRAPHIC FINDINGS**

- Improved yet persistent nodular pancreatic changes with omental nodules
- Emerging gallbladder mucocele

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Significant improvement of the pancreatic presentation noted in this patient. However, persistent remodeling noted. Underlying neoplasia is still a potential. FNA strongly encouraged. If the patient is stable, then continual BID canned feedings are recommended. If subxiphoid palpation reveals any discomfort, then continual outpatient treatment for pancreatitis warranted. Ursodiol therapy should be implemented over the next 6 weeks. If the patient is stable, recheck sonogram at that time.

Recommend continuation of antibiotic protocol such as Enrofloxacin/Metronidazole over a 4-6 week period if sampling is not an option. Hydrolyzed diet or I/D or similar would be recommended. Any bulk feedings will likely create an issue in this patient from a physical standpoint, given the amount of pancreatic pathology enveloping the duodenum. Some improvement has occurred regarding inflammation. However, an extensive amount of pathology is still present. Underlying carcinoma is still a potential in this case, though possibly slow growing.

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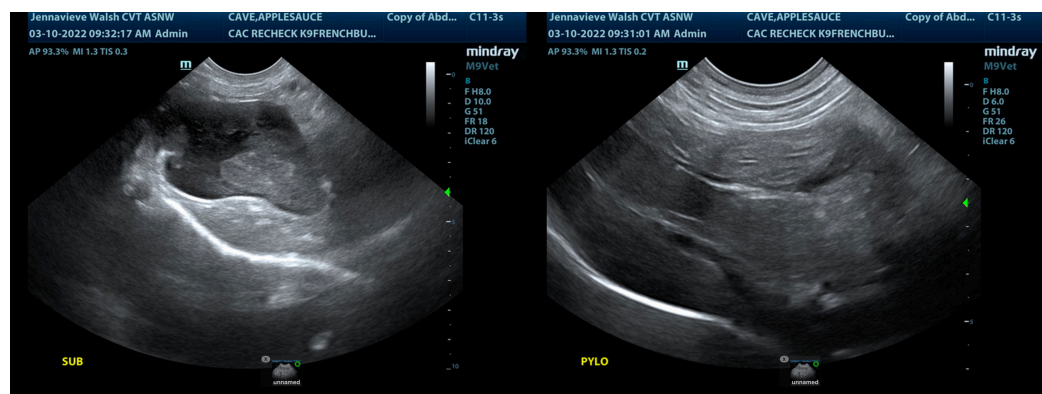
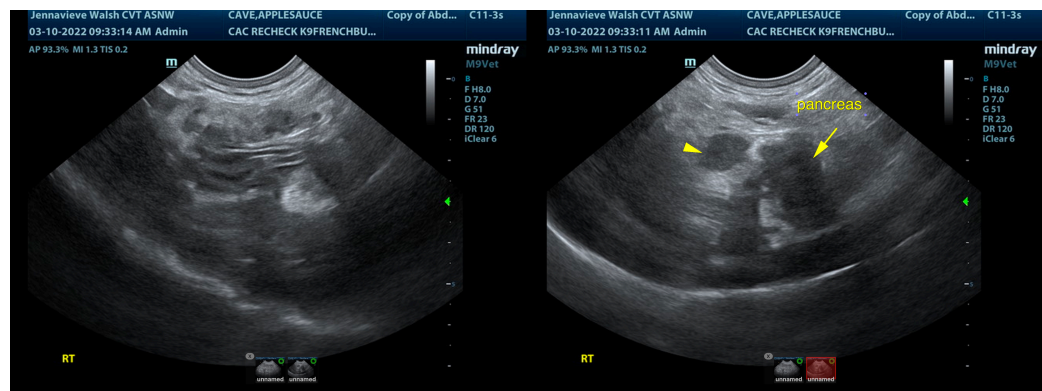
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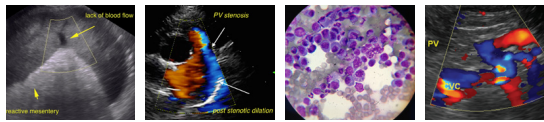
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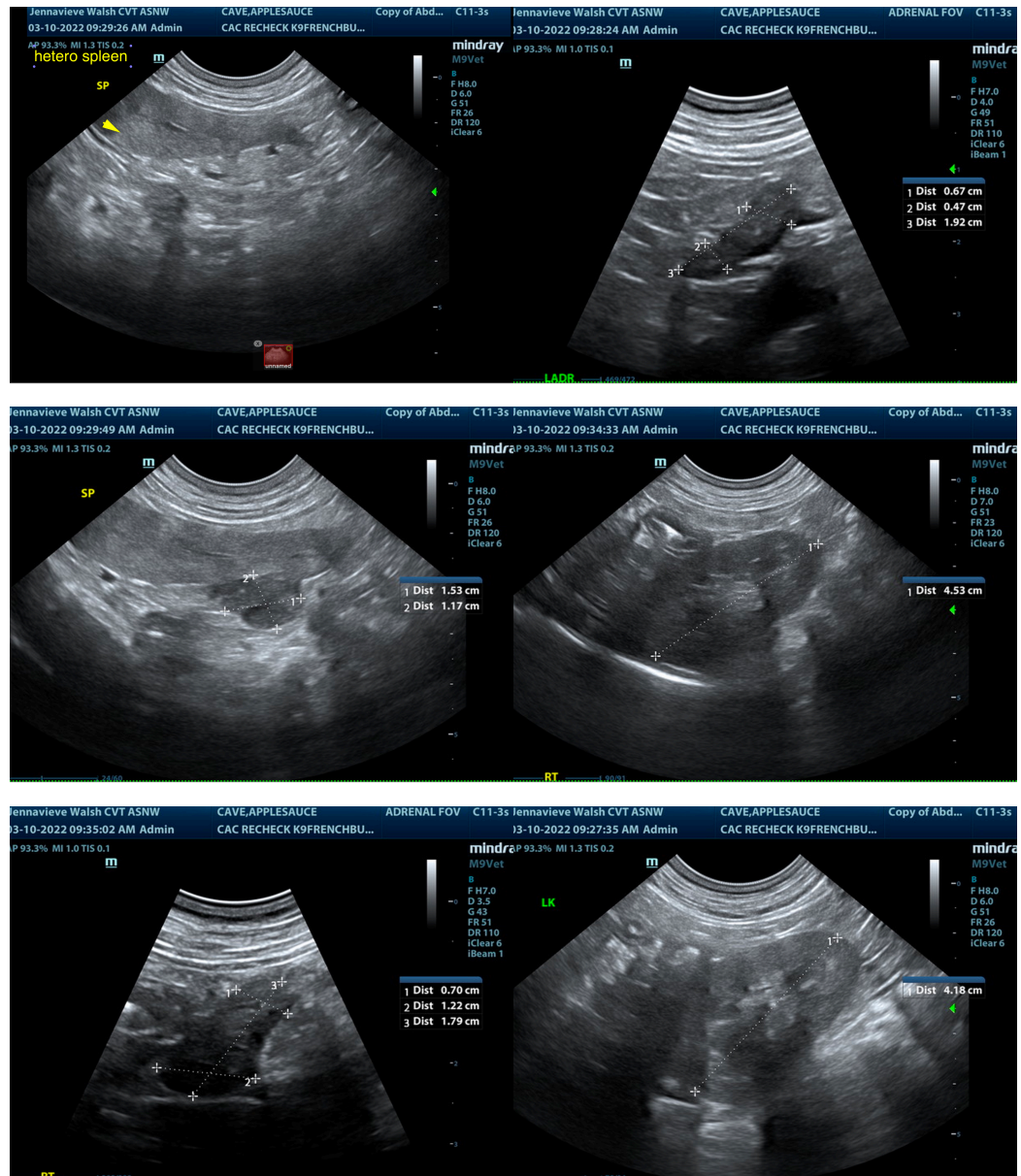
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Eric Lindquist, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com

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