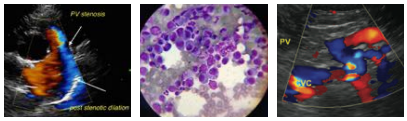
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
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DATE

9/5/22

PATIENT

Angus Buchanan

SPECIES

Canine

BREED

French Bulldog

SEX

Neutered male

AGE

2010

WEIGHT

27.3 lbs

INTERPRETED BY

Eric Lindquist, DMV DABVP, Cert. IVUSS

HOSPITAL NAME

Animal Emergency Hospital

REFERRING VET

INVOICE

32714

PRESENTING CLINICAL SIGNS

8-29-2022 Notes: PC: - Monday: Hyporexia- not eating breakfast; ate dinner - Tues- not eating - Wednesday- ate some, not well vomited in evening - Thursday- rDVM- x-rays, bloodwork- no "blockage" or pancreatitis, NSF- cerenia, pepsid + injection cerenia - Friday/ Saturday- hyporexia (no increase in appetite) - Sunday- vomiting; ate 3 bites of ground beef and greenie - Monday (now)- vomited- clear, thick, foamy - Weight loss
Medical hx: - Benadryl --> apoquel- started 1 month ago- stopped when P had decreased appetite - Received OTC anal glands, dasaquin, no diet change, no people food.
Current Medications: Ondansetron, Proviable, Fenbendazole, Benazapril, Protonix, Metronidazole, Entyce, Cisapride, Buprenorphine, Vitamin B. Also now on feeding tube with trickle feeding and lidcocaine cri
Date of Previous IntraPet Ultrasound: 9/2/22
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Andi Parkinson, RDMS.

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 was 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 right kidney measured 4.54 cm.

Adrenal Glands

Both **adrenal glands** are persistently enlarged similar to the prior sonogram. The right adrenal gland measured 2.16 x 1.18 cm at the cranial pole and 0.65 cm at the caudal pole. The left adrenal gland measured 2.58 x 1.07 cm at the cranial pole and 0.83 cm at the caudal pole.

Spleen

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.

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 revealed persistent over distension with echogenic debris, yet was slightly improved compared to the prior sonogram and is essentially similar to the prior sonogram with echogenic debris. The common bile duct is increasing in size measuring 1.0 cm in width. This was followed to the duodenal papilla. Minor duodenal wall thickening was noted, yet this is likely a strictured common bile duct related to pancreatitis or pancreatic pathology. Mild-periductal inflammatory pattern was noted.

Gastrointestinal

The **gastrointestinal tract** was empty with mild mucosal hypertrophy noted in the gastric wall. I cannot rule out microulcerative changes. 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.

Pancreas

The **pancreas** revealed hypoechoic, irregular changes in the left and right limb.

ULTRASONOGRAPHIC FINDINGS

Persistent pancreatitis with progressive common bile duct obstruction/mucoduct.
Gallbladder similar to the prior sonogram with congestion and debris.
Persistently enlarged adrenal glands.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

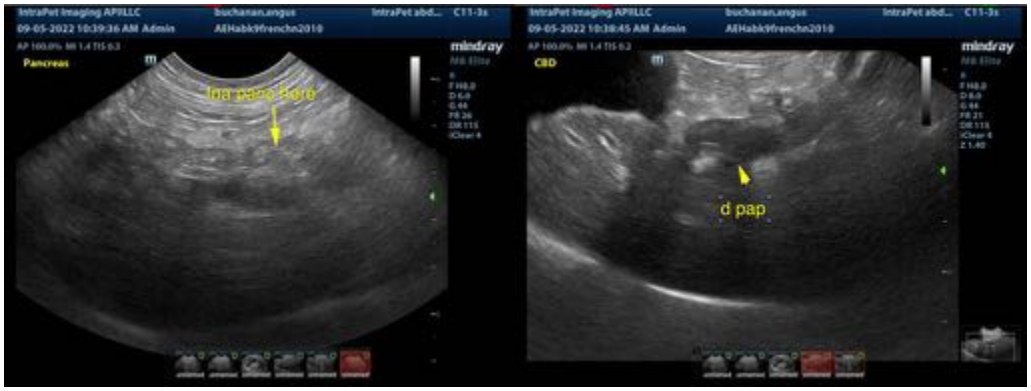
Ultrasound-guided FNA of the pancreas can be considered to assess inflammatory cell type and rule out underlying neoplasia. On the prior sonogram the common bile duct measured 0.64 cm and is now up to 1.0 cm in width. The pancreatic pathology is persistent and fairly extensive occupying the right and left limbs. This is likely playing a role in the stricturing of the common bile duct.

Although the ALKP is only mildly elevated and bilirubin elevations are not present the cause of the anorexia is likely a combination of persistent pancreatitis and persistently congested common bile duct/mucoduct.

Two approaches for this patient as the patient is not medically responding in an adequate fashion:

1. Ultrasound-guided FNA of the pancreatic parenchyma can be considered to assess type of inflammation. If lymphoplasmacytic is a predominant cell type then single dose Dexamethasone could be considered to reduce inflammation, which may potentially enhance bile flow; however, the patient should be monitored very carefully from sonographic standpoint as this could predispose to further decompensation of the biliary tree.
2. Alternatively, surgical intervention with liberation of the common bile duct likely cholecystoduodenostomy and appropriate biopsies of the pancreas, upper GI tract and liver would all be indicated.

The prognosis is guarded. There was no obvious neoplasia noted; however, underlying small neoplastic process in the duodenal papilla/duodenal wall cannot be completely ruled out as a potential, yet no evident neoplasia is present.


Pancreas
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CBD
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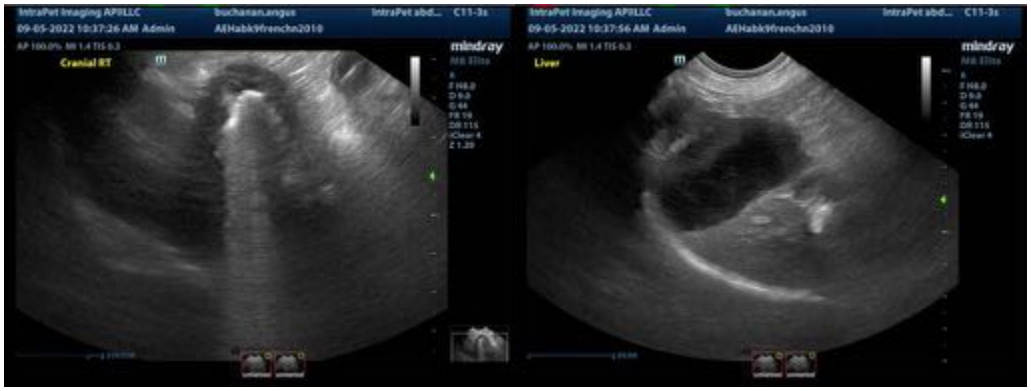
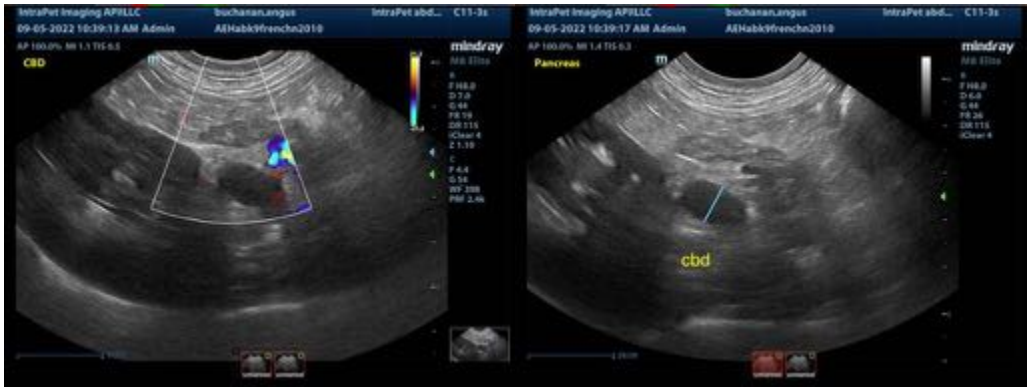
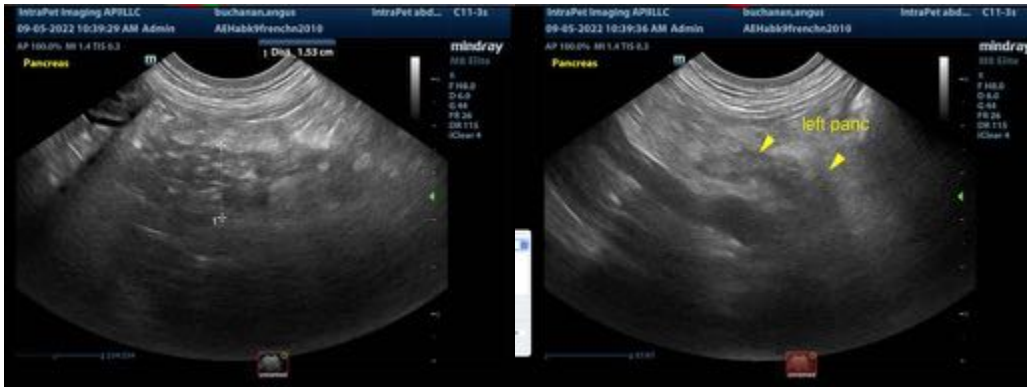
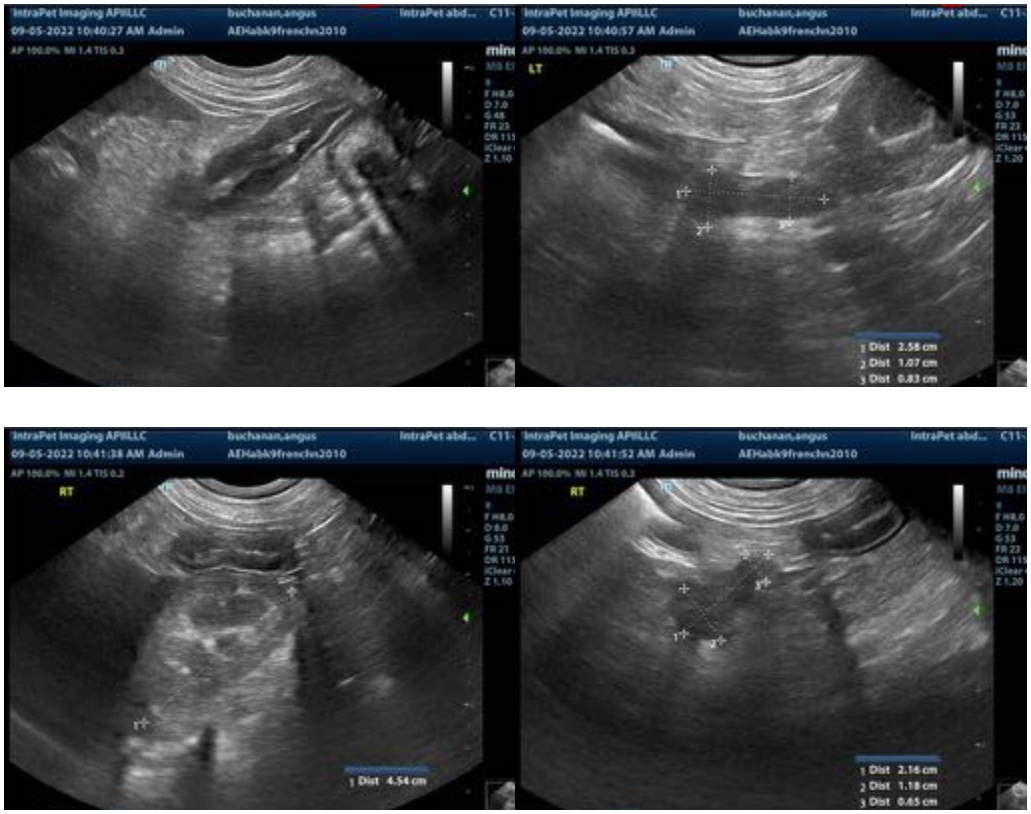
CBD
pancreas
cbd
Cranial RT


polyps
debris


Cranial RT
Liver


CBD
Pancreas
cbd


Pancreas
Pancreas
left panc



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.

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