

**DATE PRESENTING CLINICAL SIGNS**

3/15/23 Previous history of kidney disease, Cushings disease, hypertension, hepatocellular vacuolar degeneration. Splenectomy 1/22/22, partial cruciate tear 1 month ago. Currently is lethargic and having acute vomiting episodes.

PATIENT

Ginger Puryear

Current Medications: Currently on Vetoryl 5 mg PO BID, Buprenorphine PO (0.3 mg/L) 0.25 mL q8-12 for pain, Gabapentin 50mg tablets PO BID, Amlodipine unknown dosage, Amantadine unknown dosage, and Clindamycin 150mg PO BID.

SPECIES

Canine

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

BREED

Cock-A-Poo

Imaging Performed By: Andi Parkinson, BS, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**SEX**

Spayed Female

Urinary System

The urinary bladder is moderately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

AGE

4/5/09

Kidneys are overall normal in size and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortices are uniform in texture with some mild increased cortical echogenicity and mild loss of corticomedullary distinction, expected in this age patient. There is no evidence of pyelectasia, mineral or infarcts observed. The left kidney measures 5.1 cm. The right kidney measures 4.64 cm. Small bilateral cortical cysts noted.

WEIGHT

25.9 Pounds

Adrenal Glands

The right adrenal gland is small (flattened contour), measuring 1.41 cm long x 0.39 cm thick. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

INTERPRETED BYBeth Johnson, DVM
DACVIM

The left adrenal gland is plump/swollen in size, measuring 2.28 cm long x 0.96 cm at the cranial pole and 0.93 cm at the caudal pole. Normal shape and contour are maintained without evidence of capsular invasion. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

HOSPITAL NAME

Timonium AH

Spleen

The spleen has been previously removed.

REFERRING VET

Dr. Lentz

Liver

Liver is subjectively enlarged with mildly irregular margins. Parenchyma is heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. Visible vasculature and biliary tree appear normal without distension or congestion.

INVOICE

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Gallbladder is moderately distended with anechoic bile as well as mild suspended and gravity dependent echogenic debris. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.

Gastrointestinal

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is mildly distended with echogenic non-shadowing luminal contents and gas consistent with normal ingesta. There is no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The visible small intestines are normal in wall thickness and layering (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

Pancreas

The observed pancreas is prominent (enlarged) in size, hypoechoic to surrounding tissue and irregular in shape with a swollen undulating contour. Enhanced hyperechoic ill-defined surrounding fat is noted. In the left caudal limb, there are several discrete hypo- to anechoic 1.5 cm x 2.0 cm nodules/lesions that don't appear to have adequate blood flow. The area is surrounded by enhanced hyperechoic mesenteric fat.

Free Abdomen

There is no evidence of free peritoneal effusion noted in these images.

There is no apparent lymphadenopathy noted in these images.

PRIMARY FINDINGS

- Acute pancreatitis with suspect pancreatic cysts or abscesses in the caudal left limb. Infiltrative neoplastic nodules can't be ruled out but are thought less likely.
- **Heterogenous Liver** – These changes are most consistent with benign processes such as nodular hyperplasia, steroid (vacuolar) hepatopathy, extramedullary hematopoiesis or possibly chronic inflammatory disease and less commonly infiltrative round cell or metastatic neoplasia.
- **Mild gallbladder debris** - Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.
- Adrenal gland changes are consistent with this patient's reported history of hyperadrenocorticism and therapy with Vetoryl.

SECONDARY FINDINGS

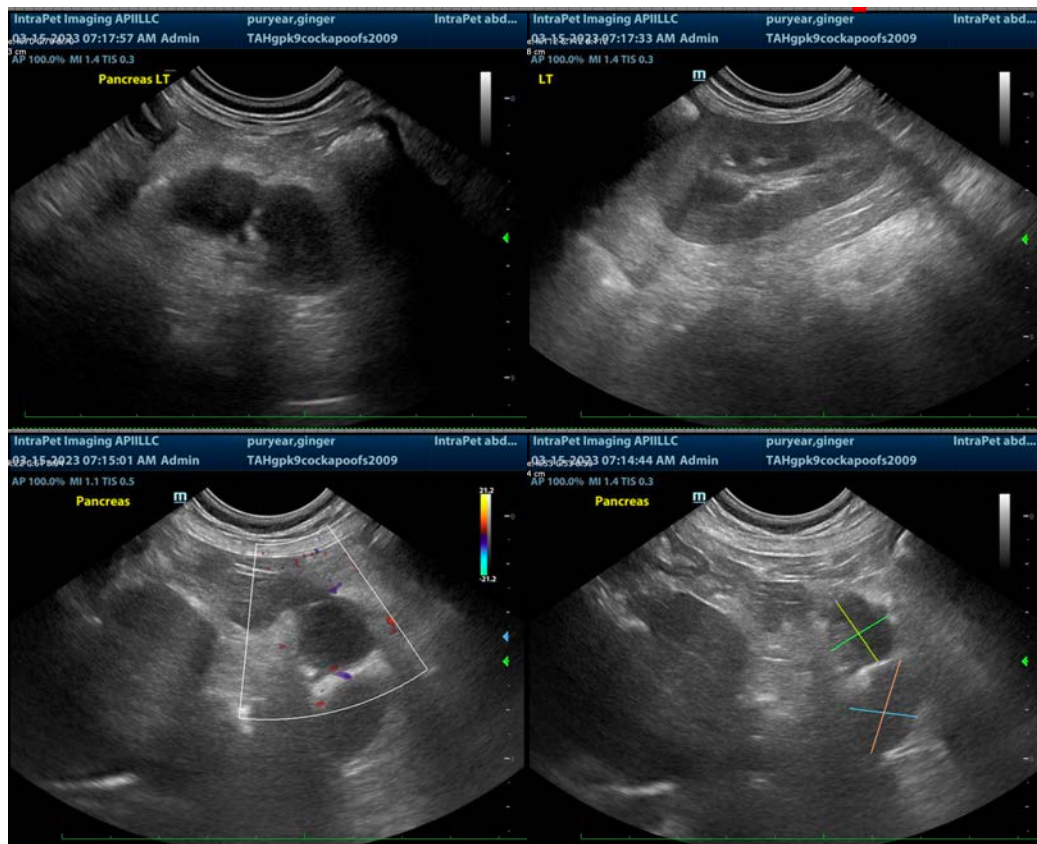
- Age related kidney changes with multiple small bilateral cortical cysts
- Previously removed spleen

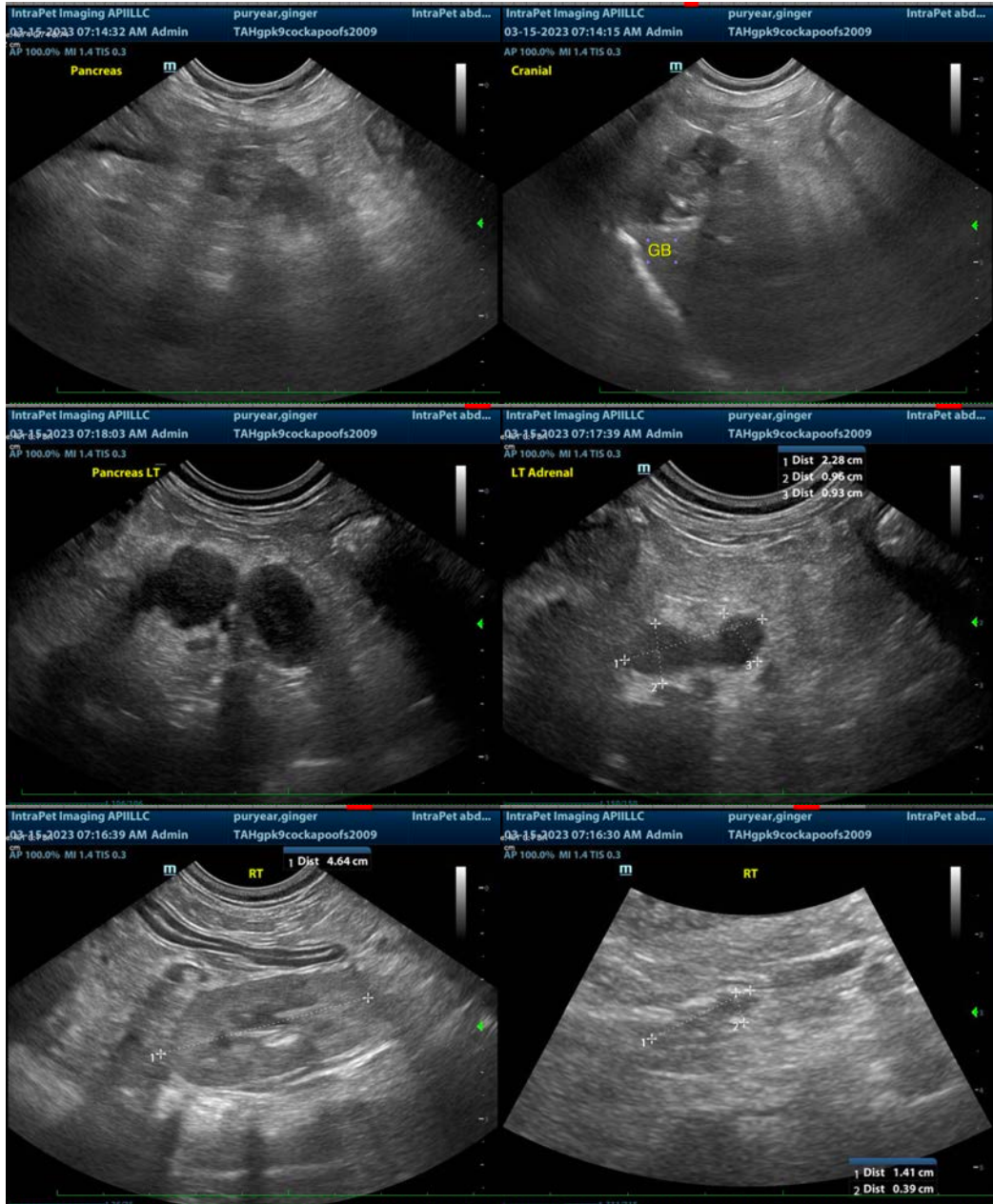
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

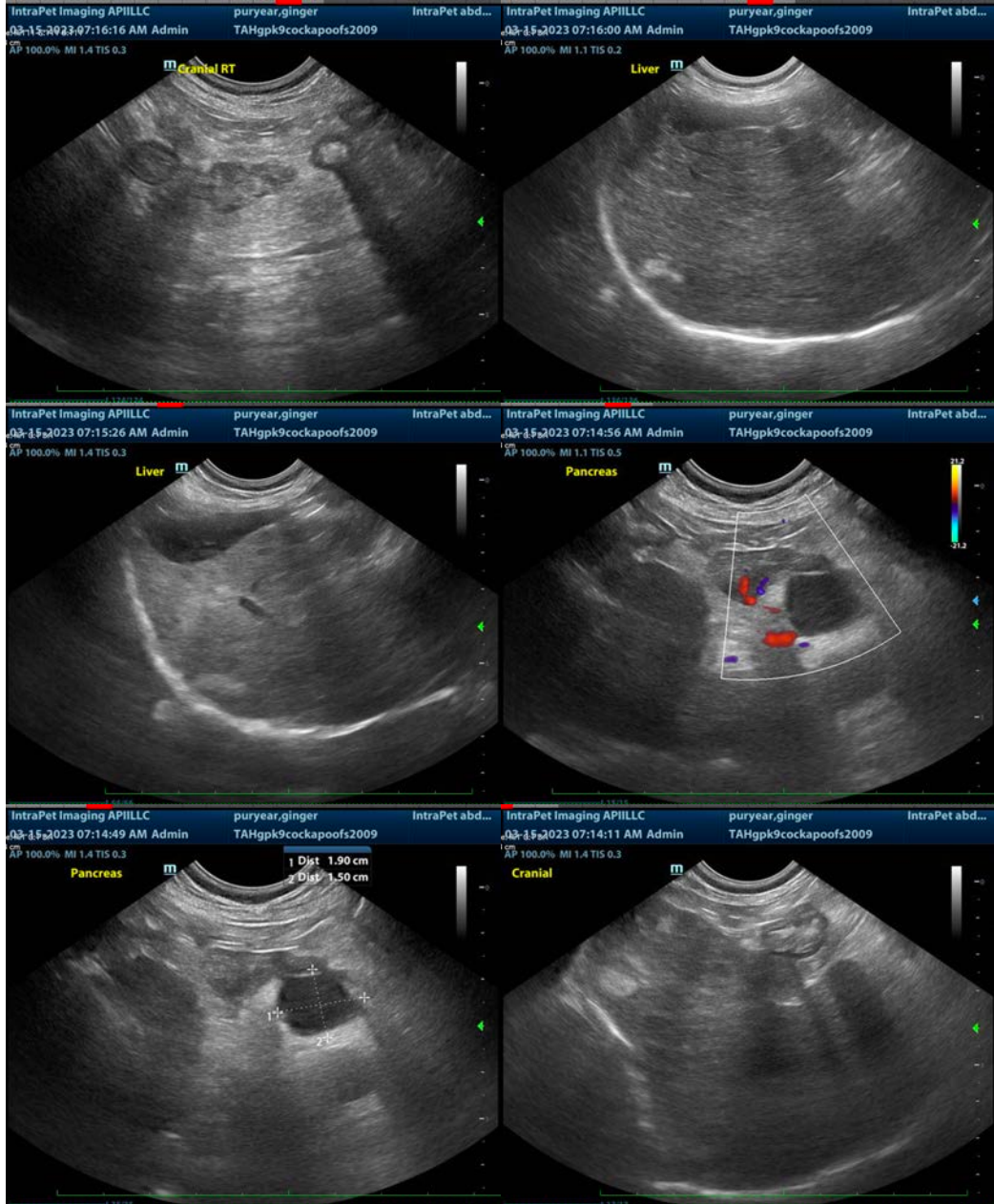
This patient's reported lethargy and nausea appear likely to be secondary to pancreatitis and potentially pancreatic abscesses emerging. If not recently evaluated, a general metabolic health screen is recommended, beginning with CBC/Chem panel, electrolytes, a urinalysis and, if indicated based on urinalysis results, urine culture. If protein is present in an otherwise quiet sediment, protein quantification with a urine protein to creatinine ratio is recommended. Additionally, a quantitative PLI is recommended.

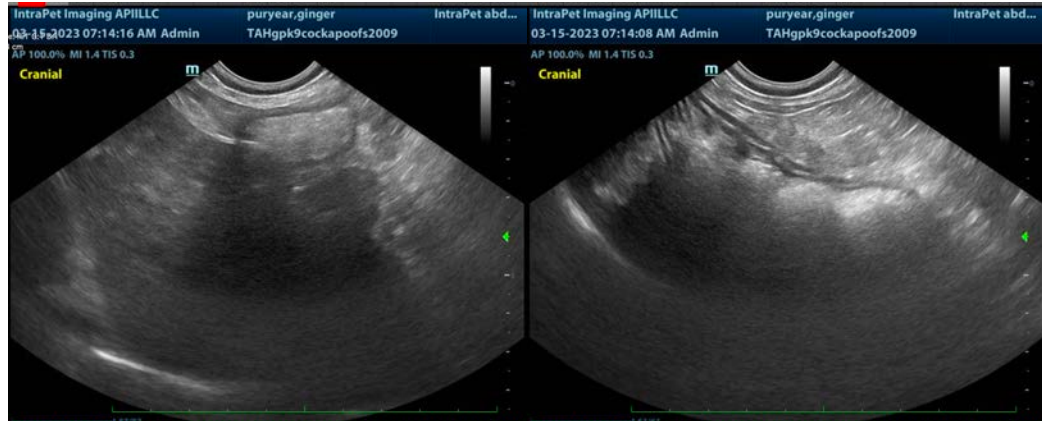
An ACTH stimulation test could be considered to rule out concurrent hypoadrenocorticism secondary to Vetoryl therapy, but regardless, recommendations are to at least temporarily discontinue Vetoryl until the patient has clinically resolved and is eating again, etc.

Ideally, fine needle aspirates of the pancreatic lesions would be obtained if patient's coagulation status is appropriate. However, reportedly the lesions cannot safely be reached by this method. Therefore, medical management of pancreatitis with anti-emetics, gastroprotectants, appetite stimulants or nutritional support as needed, pain management, broad spectrum antibiotics, and fluid therapy is recommended. If possible, a fresh frozen plasma transfusion and hyperbaric oxygen therapy (HBOT) could be beneficial. Monitoring of the pancreas with power doppler is recommended to identify possible necrosis as well as other potential sequelae such as abscesses, etc. If clinical signs and/or the lesions progress, an exploratory laparotomy for biopsies, omentalization, etc. of the pancreatic lesions may be necessary.









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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