

**DATE PRESENTING CLINICAL SIGNS**

12/1/22 PU/PD. Owner concerned with Cushinoid signs. CrCL rupture LH. owner would like surgery to stabilize. Trending increase in Alk Phos

PATIENT

Max Martz Current Medications: Galliprant 20mg 1 PO SID since 11/25/2022
Gabapentin 50mg 1 PO TID-BID NOVEMBER, Trazodone 25mg PRN
Lab Results: Increased BUN 33, Increased ALBUMIN 4.0, Increased ALT 178, Increased ALK PHOS 1617, Increased AMYLASE 1982, Increased LIPASE 4779. CBC from 8/2022 WNL

SPECIES

Canine Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

BREED

Morkie

SEX

Neutered Male

AGE

1/1/13

WEIGHT

24.4 Pounds

INTERPRETED BY

Beth Johnson, DVM
DACVIM

IMAGING PERFORMED BY

Rachel Brillhart RDMS

HOSPITAL NAME

Jacksonville VH

REFERRING VET

Dr. Larsson

INVOICE

43125

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**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.

Prostate is normal in size, echotexture and echogenicity for a neutered male.

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 5.94 cm. The right kidney measured 5.15 cm.

Adrenal Glands

Adrenal glands are plump/swollen in size. Normal shape and contour are maintained without evidence of capsular invasion. Some parenchymal heterogeneity is present without concerning capsular distortion. Visible surrounding vasculature appears normal. The left adrenal gland measures 2.61 cm long x 0.67 cm at the cranial pole and 0.99 cm at the caudal pole. The right adrenal gland measures 2.55 cm long x 0.90 cm at the cranial pole and 0.96 cm at the caudal pole.

Spleen

The spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

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.

The gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

Gastrointestinal

The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is empty with 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

Pancreas is prominent in size with swollen irregular contour. Parenchyma is heterogenous characterized by hyperechoic tissue remodeling intermixed with ill-defined hypoechoic nodules. There is no visible pancreatic duct dilation. Mildly enhanced hyperechoic surrounding mesenteric fat is noted and a very scant amount of anechoic free fluid, which may suggest some mild active or resolving inflammation.

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

- **Bilateral adrenomegaly with mild age related change** – consistent with adrenal hyperplasia secondary to pituitary dependent hyperadrenocorticism vs stress or normal variant. Interpret in combination with clinical signs of hyperadrenocorticism.
- **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.
- **Pancreatic nodular hyperplasia** – Infiltrative neoplasia cannot be ruled out but is considered less likely. Mild acute or resolving pancreatitis is suspected concurrently.

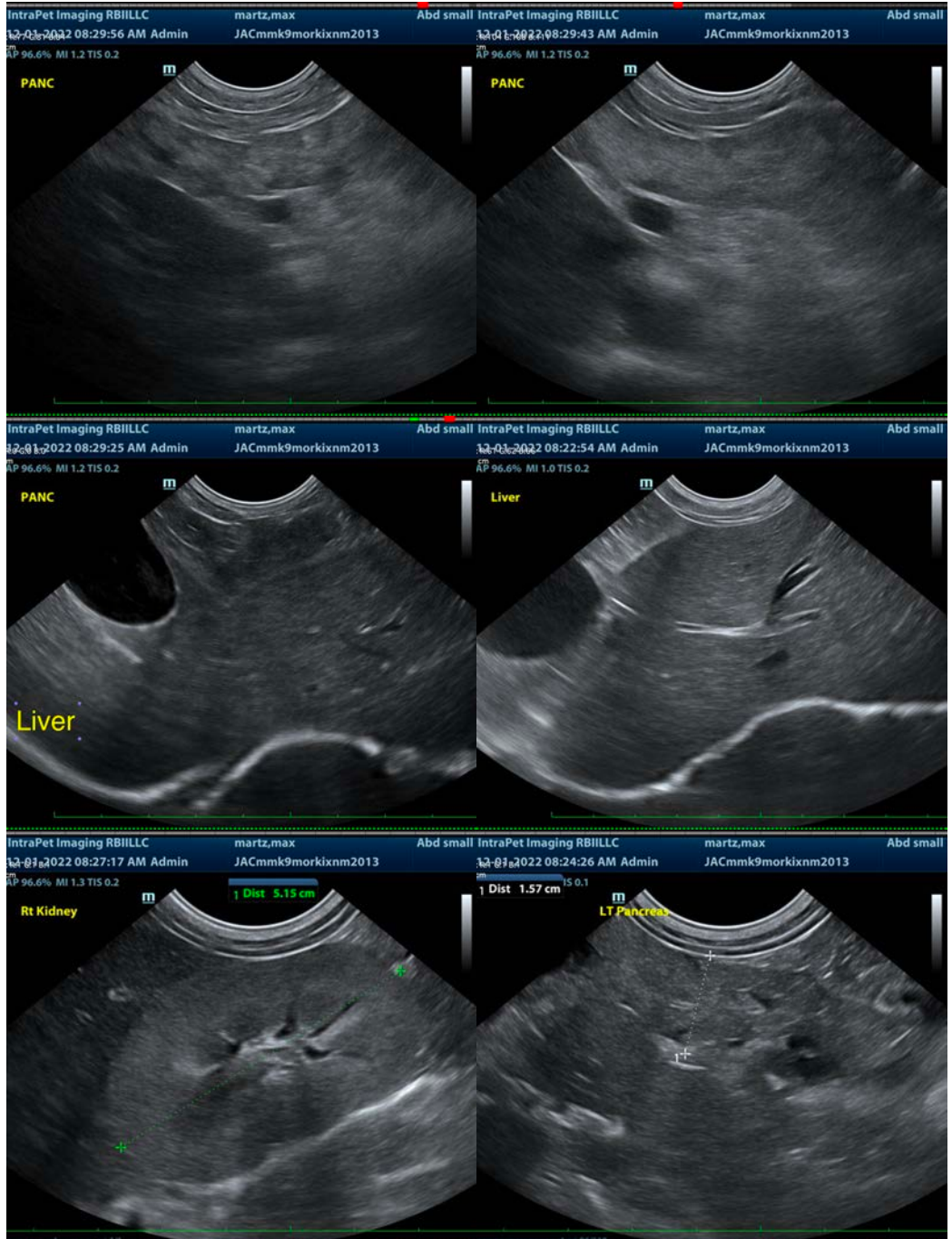
SECONDARY FINDINGS

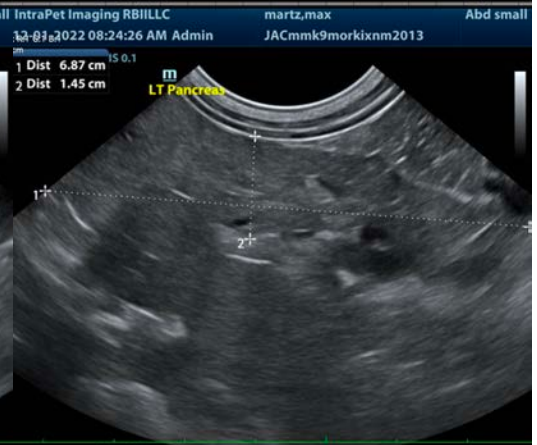
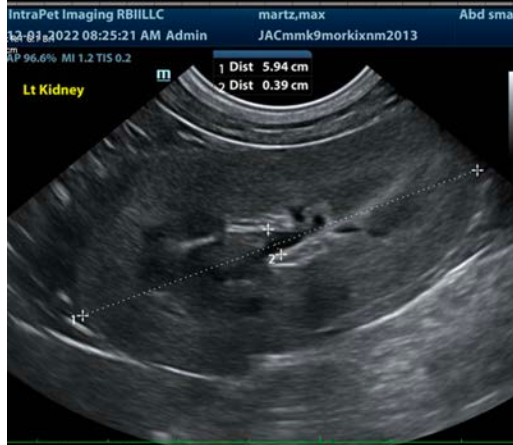
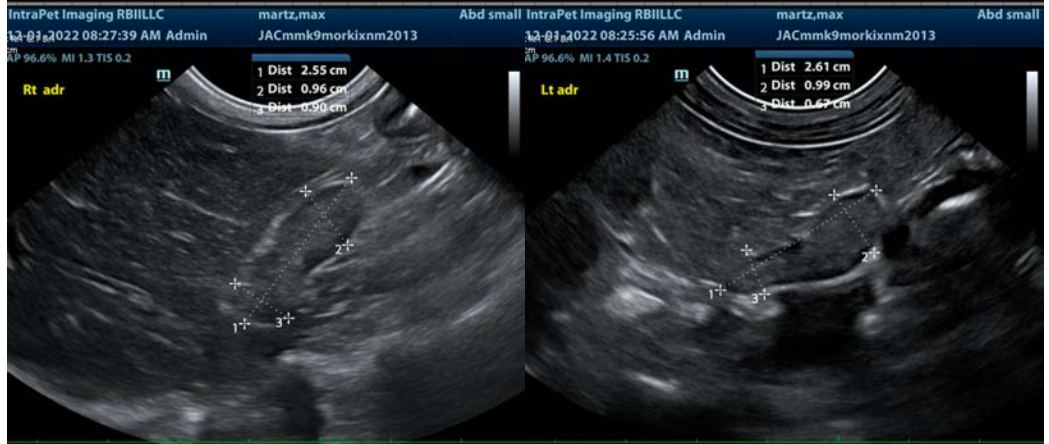
- Age related kidney changes

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Further evaluation of this patient's pancreas with both a TLI and PLI is recommended in the form of a gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory.

Given this patient's reported clinical signs and adrenal and liver changes, hyperadrenocorticism (likely pituitary in nature) could be present, and testing is recommended in the form of a low-dose Dexamethasone suppression test. Additionally, a blood pressure is recommended if not recently evaluated. Incidentally, if diagnosed, management of hyperadrenocorticism could result in improved healing of the planned cruciate repair.





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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