

**DATE PRESENTING CLINICAL SIGNS**

6/28/22

9 year old FS vizsla mix. Hx of Elevated Liver values (both ALT and Alk phos) nd proteinuria. P is prone to allergic reactions, so she is frequently on steroids prescribed by ER vets. Currently doing well at home. But has been pu/pd in the past.

PATIENT

Amber Michaelson

Current Medications: Starting Denamarin today., Currently not on any medications.

Lab Results: Alk phos -3,959, ALT- 110 (prev 137), Urine Cortisol – Normal, T4- normal, UPC- pending.

Date of Previous IntraPet Ultrasound: No previous.

SPECIES

Canine

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

BREED

Vizsla

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.

SEX

Spayed Female

The right kidney is normal in size (6.7 cm), shape and echogenicity. It has smooth peripheral margination.

There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

AGE

4/9/13

The left kidney is normal in size (6.61 cm), shape and echogenicity. It has smooth peripheral margination.

There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

WEIGHT

71 Pounds

Adrenal Glands

The right adrenal gland is enlarged (3.74 cm x 2.18 cm) with marked heterogenous parenchymal changes. Swollen capsular expansion is noted without evident capsular escape or vascular invasion.

The left adrenal gland is uniformly plump and egg-shaped (2.76 cm long x 0.70 cm at the cranial pole and 0.44 cm at the caudal pole), hypoechoic in echogenicity with bilateral dystrophic mineralization noted. This is most likely a benign age-related change. This change can be caused by chronic stress/disease, so investigation for/management of other disease (chronic kidney disease, hyperthyroidism, etc.) is recommended.

INTERPRETED BYBeth Johnson, DVM
DACVIM**IMAGING PERFORMED BY**

Andi Parkinson RDMS

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.

HOSPITAL NAME

Banfield Timonium

REFERRING VET

Dr. Adu

Liver

The liver is subjectively enlarged in size with slightly irregular margins. Parenchyma is heterogeneous, characterized by multifocal discrete round hypoechoic nodules within an otherwise slightly hyperechoic liver parenchyma. Visible vasculature and biliary tree appear normal without distension or congestion.

INVOICE

39079

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 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 pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

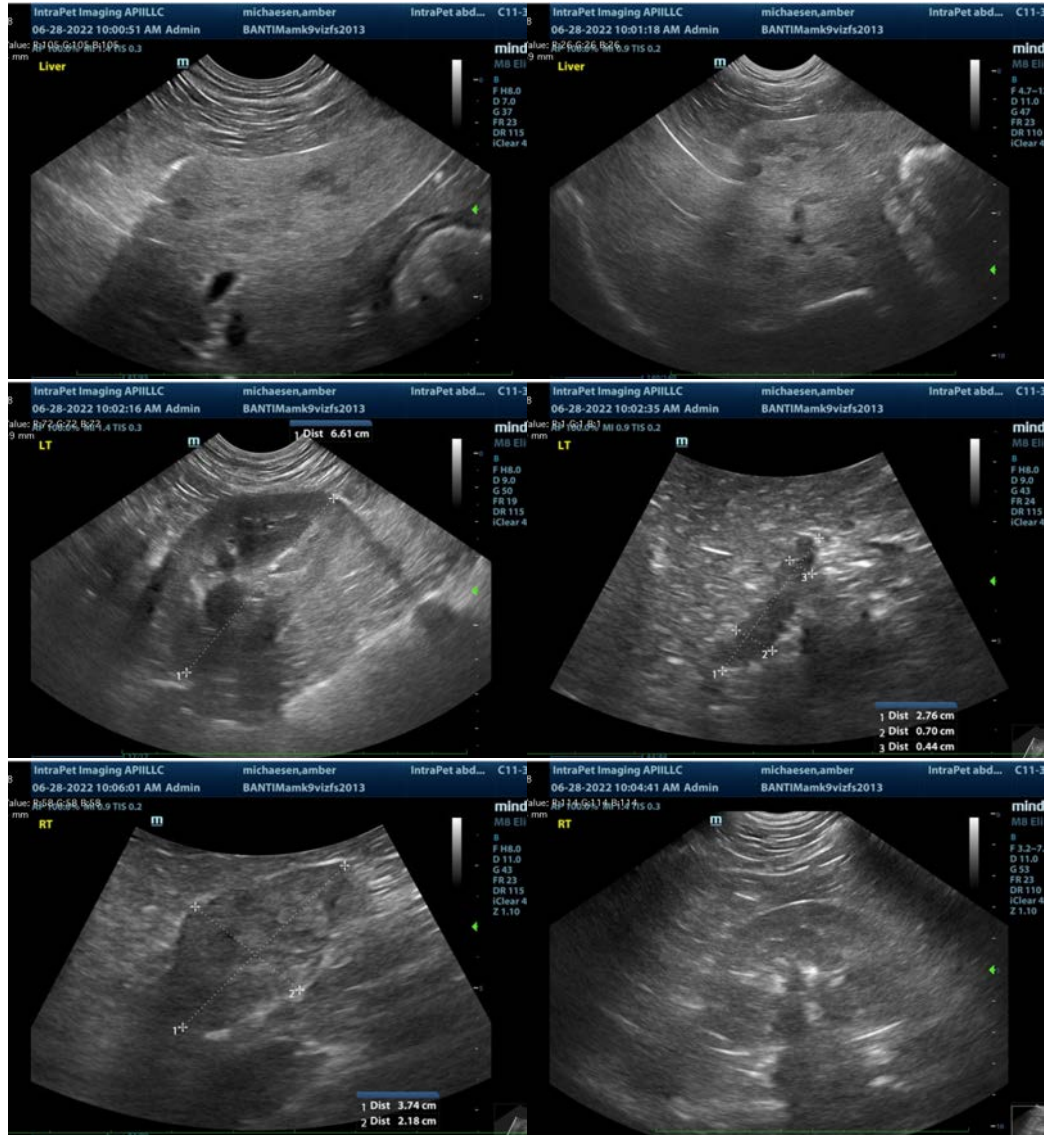
There is no evidence of peritoneal effusion. There is no apparent lymphadenopathy.

ULTRASONOGRAPHIC FINDINGS

- Adrenal mass - consistent with adenoma or possibly hyperplasia. Emerging adenocarcinoma or early pheochromocytoma cannot be ruled out. Interpret in combination with clinical signs of hyperadrenocorticism or other adrenal disease. Functional adrenal cortical disease, be it benign or malignant, is suspected based on the flat contralateral adrenal gland.
- Nodular/moth-eaten liver – These changes can occasionally be seen with a benign process such as nodular hyperplasia, extramedullary hematopoiesis, etc. However, infiltrative round cell or metastatic neoplasia is more likely.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Three view thoracic radiographs are recommended for further assessment of cardio-pulmonary status as well as to further evaluate for any evidence of metastatic disease, if not recently evaluated.
- Fine needle aspirate of the liver is recommended if patient's coagulation status is appropriate.
- Adrenal cortical testing in the form of a low-dose Dexamethasone suppression test could be considered if patient has clinical signs of hyperadrenocorticism, followed potentially by an abdominal CT scan for surgical planning of ultimately a right adrenalectomy. However, if this patient does not have clinical signs of hyperadrenocorticism and a conservative approach is elected, especially given the concurrent liver changes, close monitoring of the adrenal gland is recommended with recheck ultrasound in 6-8 weeks, again pending the result of the fine needle aspirate of the liver.



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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