

**DATE**

10/21/21

PRESENTING CLINICAL SIGNS

History: Increasing liver enzymes despite treatment w Denamarin , Clavamox.
Current Medications: Denamarin Large breed for 30 days and Simplicef 200 mg SID for 21 days
Lab Results: ALT post-treatment went from 124, to 219, to 226
Alk Phos 166 to 414 to 557
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not needed.
Stat Report: Not requested.

PATIENT

Maggie Doyle

SPECIES

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

Urinary bladder is moderately distended with anechoic contents. It has normal uniform wall thickness (< 0.2 cm). No masses or cystoliths are observed.

BREED

Catahoula Leopard

SEX

Spayed Female

Left kidney is normal in size (6.88 cm), shape and echogenicity. It has smooth peripheral margination and appropriate corticomedullary distinction. An incidental cortical cyst was noted in the left kidney. There is no pyelectasia noted. No mineral is observed.

AGE

2009

Right kidney is normal in size (6.95 cm), shape and echogenicity. It has smooth peripheral margination and appropriate corticomedullary distinction. There is no pyelectasia noted. No mineral is observed.

WEIGHT

62 lbs

Adrenal Glands

The left adrenal gland is enlarged in size (3.3 cm long, 0.96 cm at cranial pole and 1.2 cm at caudal pole). Normal shape and contour are maintained. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal. A hyperechoic nodule was noted in the caudal pole of the left adrenal gland. The nodule does not disrupt the normal shape, but results in a lack of corticomedullary distinction.

INTERPRETED BYBeth Johnson, DVM
DACVIM

The right adrenal gland is normal in size (2.4 cm long, 0.7 cm at cranial pole and 0.56 cm at caudal pole). Normal shape and contour are maintained. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

HOSPITAL NAME

North Laurel AH

Spleen

Spleen is subjectively normal in size with normal smooth capsular contour. Parenchyma is homogeneously coarse/mottled in echotexture and normal in echogenicity. No focal nodules or masses are observed. Splenic vasculature appears normal.

REFERRING VET

Dr. Cohn

Liver

Liver is subjectively normal in size. Margins are sharp and smooth. It has normal homogenous echotexture and normal echogenicity. A 7.5 cm, round, heterogenous mass with an anechoic center was noted in the mid to right liver. . Visible vasculature appears normal. Gallbladder is mildly distended with anechoic contents. The wall is smooth without visible thickening. There is no evidence of common bile duct dilation.

INVOICE

92562

Gastrointestinal

The visible gastric wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm). The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The small intestines are normal in wall thickness and layering. Small intestinal motility appears adequate (1-3 contractions per min). There are no luminal contents noted within small intestines.

Colon is normal in wall thickness (< 0.2 cm) and layering.

Pancreas

Pancreas has normal homogenous echotexture and is normal in echogenicity and smooth margination. There is no evidence of peripancreatic inflammation.

Free Abdomen

Lymph nodes are normal with no observed enlargement.

Heart

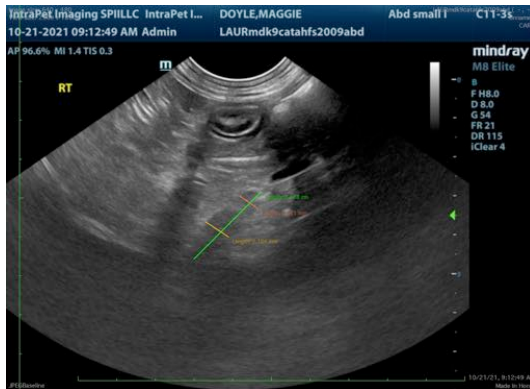
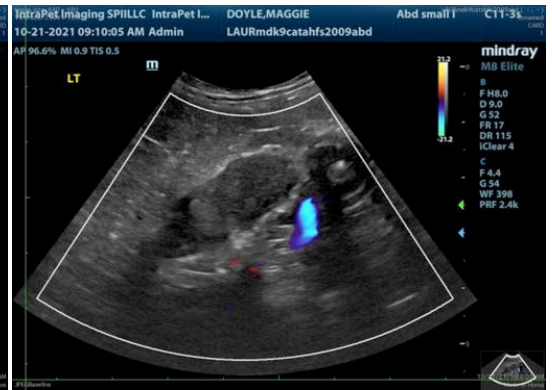
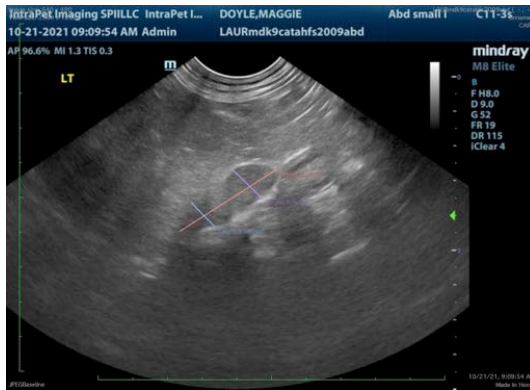
No pericardial effusion is noted in these images.

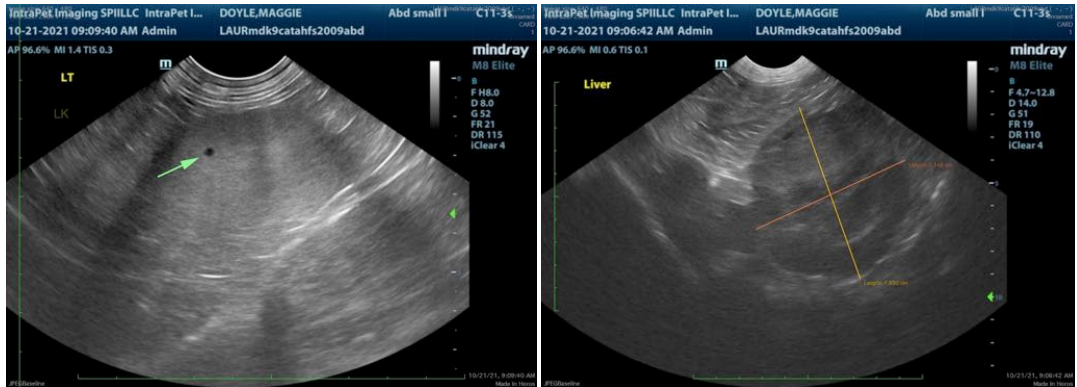
ULTRASONOGRAPHIC FINDINGS

- Left adrenomegaly with hyperechoic adrenal nodule in the caudal pole. Differentials include primary adrenal cortical adenoma or adenocarcinoma, pheochromocytoma, myelolipoma or adrenal hyperplasia secondary to pituitary disease or metastatic disease. Ultrasound alone cannot differentiate between functional and non-functional nodules and/or between benign and malignant disease. Lesions > 2.0 cm are generally primary adrenal neoplasia benign or malignant versus hyperplasia and lesions > 4.0 cm are more predicative of malignant neoplasia.
- The right adrenal gland in this patient is not small so the adrenomegaly is most consistent with an incidental normal variant or benign change or if clinical signs of hyperadrenocorticism are present then adrenal hyperplasia secondary to pituitary disease.
- Incidental left renal cortical cyst.
- A coarse spleen, which can be associated with congestion caused by sedation, but can also be associated with diffuse infiltrative disease, benign condition such as extramedullary hematopoiesis or lymphoid hyperplasia as well as infiltrative neoplastic diseases such as round cell neoplasia should be considered.
- Liver mass. The appearance of hepatic neoplasia with ultrasound varies and benign versus malignant disease cannot be distinguished via ultrasound alone. Differentials include hepatocellular adenoma/carcinoma, round cell neoplasia such as lymphosarcoma, histiocytic sarcoma, mast cell tumor, etc. Hemangiosarcoma, leiomyosarcoma, fibrosarcoma or metastatic carcinoma as appearance can vary. Nodular hyperplasia is also possible, but considered less likely given the change in normal curvilinear architecture.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Recommendations include a FNA of the liver mass and spleen if the coagulation status is appropriate. However, given the risk of hemorrhage from liver tumors aspirate may be skipped in exchange for an exploratory surgery with excisional biopsy of the liver mass. If clinical signs of hyperadrenocorticism are present then testing in the form of a low-dose Dexamethasone suppression test can be considered after full recovery from surgery. Three view thoracic radiographs are recommended prior to surgery to further assess cardiopulmonary status and look for metastatic disease.





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.

Beth Johnson, DVM DACVIM

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