

**DATE**

6/27/22

PRESENTING CLINICAL SIGNS

Hx of elevated ALP 1214. Hx of controlled hypothyroid. Hx atopy, severe otitis externa. PE: dental disease, otitis externa, pyoderma.

Current Medications: Thyro-tabs 0.1mg BID.

PATIENT

Lab Results: ALP 1214.

Opie Strause

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

SPECIES

Imaging Performed By: Andi Parkinson, BS, RDMS.

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**BREED****Urinary System**

Dachshund

Urinary bladder is adequately distended. It has a normal uniform wall thickness. Contents include primarily anechoic fluid with occasional echogenic non-shadowing debris, most consistent with exfoliated cells, mucous and/or small blood clots. Both sterile inflammation as well as urinary tract infection can also present with echogenic debris. Mineral partially shadowing sand is settled against the dependent wall. Small, plump cystoliths cannot be ruled out. No masses or cystoliths are observed. The trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

SEX

Neutered male

AGE

The prostate is normal for a neutered dog.

8/20/11

Left kidney is normal is size (6.02 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 or infarcts observed. Non-obstructive areas of mineralization/nephroliths are noted.

WEIGHT

27.3 lbs

Right kidney is normal is size (5.6 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 or infarcts observed. Non-obstructive areas of mineralization/nephroliths are noted.

INTERPRETED BY

Beth Johnson, DVM
DACVIM

Adrenal Glands

Adrenal glands are plump/swollen in size. Normal shape and contour are maintained without evidence of capsular invasion. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal. Both adrenal glands contained non-capsular disrupting hyperechoic nodules. The left adrenal gland measured 2.7 cm long, 1.0 cm at the cranial pole and 1.13 cm at the caudal pole. The right adrenal gland measured 2.5 cm long, 0.99 cm at the cranial pole and 0.7 cm at the caudal pole.

HOSPITAL NAME

Eastern AH

REFERRING VET

Dr. Cusack

Spleen

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.

INVOICE

31257

Liver

Liver is subjectively enlarged (swollen contour) without disruption of architecture. It has a normal homogenous echotexture. Parenchyma is diffusely hyperechoic characterized by less prominent than normal portal vein walls and increased echogenicity relative to the spleen and falciform fat. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is moderately distended with anechoic bile as well as 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. 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 area of the pancreas contains irregular hyperechoic pancreatic remodeling.

Free Abdomen

There is no evidence of peritoneal effusion or apparent lymphadenopathy noted in these images.

ULTRASONOGRAPHIC FINDINGS

PRIMARY FINDINGS:

1. **Bilateral adrenomegaly** – consistent with adrenal hyperplasia secondary to pituitary dependent hyperadrenocorticism vs stress or normal variant. Interpret in combination with clinical signs of hyperadrenocorticism.
2. **Hyperechoic adrenal nodule** – Differentials include primary adrenal cortical adenoma or adenocarcinoma, pheochromocytoma, myelolipoma, 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. Small nodules without other evidence of abdominal disease (to suggest metastatic disease) and/or clinical signs (to suggest hyperadrenocorticism) are most often incidental and should be monitored.

SECONDARY FINDINGS:

1. **Hyperechoic hepatomegaly (canine)** – This appearance is most consistent with a benign steroid (endocrine) or vacuolar hepatopathy or reactive or idiopathic hepatopathy. Infiltrative neoplasia such as round cell neoplasia is also possible, but considered less likely.
2. **Canine 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.
3. Bilateral, non-obstructive nephrolithiasis and urinary bladder sand/mineral noted.

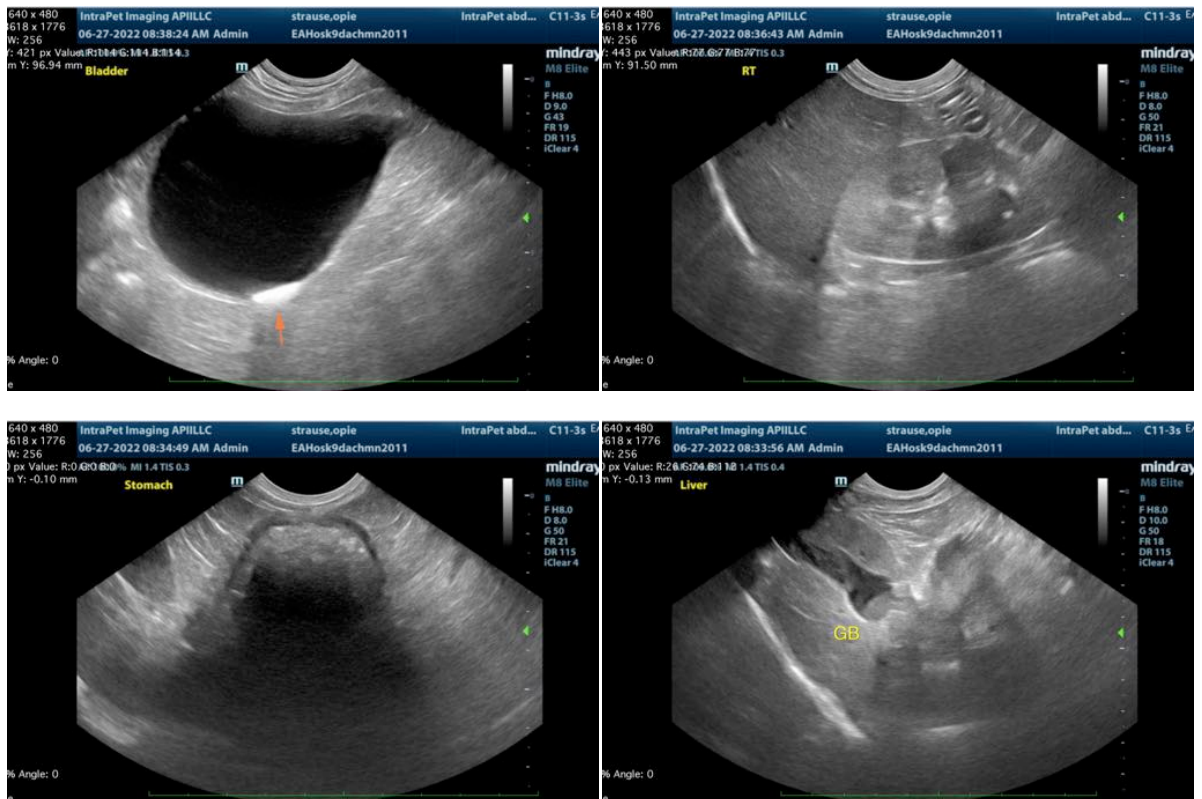
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

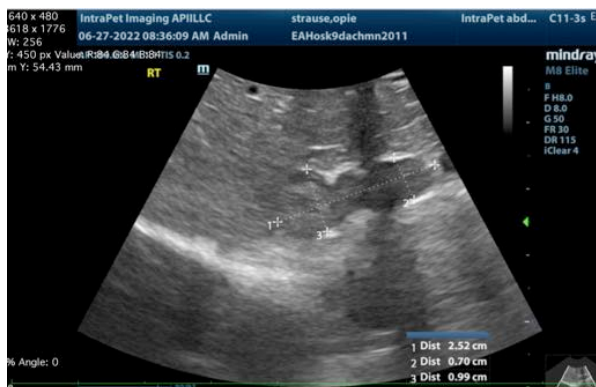
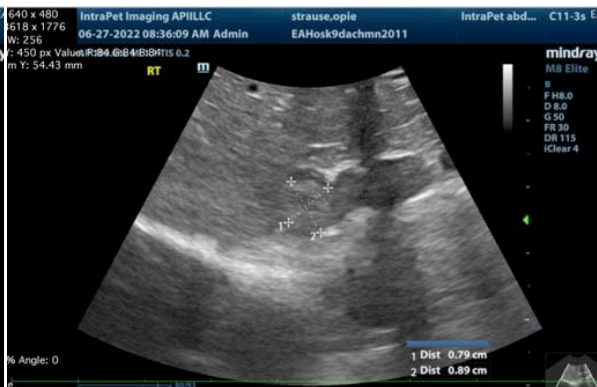
Recommendations:

The described adrenal gland, liver and gallbladder changes are all suggestive of hyperadrenocorticism. If clinical signs of hyperadrenocorticism, such as polyuria, polydipsia, polyphagia, panting, hair loss, hypertension, etc. are present, testing for hyperadrenocorticism with a LDDS test is warranted. If clinical signs are not present, monitoring is recommended with testing pursued when/if clinical signs develop.

If not recently evaluated, blood pressure is recommended.

If not recently evaluated, a urinalysis and, if indicated based on urinalysis results, urine culture are also recommended. If protein is present in an otherwise quiet sediment, protein quantification with a urine protein to creatinine ratio is recommended.







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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