

PATIENT PRESENTING CLINICAL SIGNS

Coallie Melinda History: Elevated liver values: ALKP 1728 U/L 23 - 212 HIGH ALT 250 U/L 10 - 125 HIGH AST 71 U/L 0 - 50 HIGH Last labs from previous records showed liver values in 2021 at: ALKP 1091 U/L H 5 - 160 ALT 138 U/L H 18 - 121 AST 30 U/L 16 - 55

SPECIES

Canine

BREED

Mini Schnauzer

SEX

Female Spayed

AGE

13 years

WEIGHT

14.61 lbs

INTERPRETED BY

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Animal Internal Medicine*)

IMAGING PERFORMED BY

Jenna Walsh, CVT

HOSPITAL NAME

The Ark VC

REFERRING VET

Dr Sangl

INVOICE

12448

DATE

3.16.23

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder wall is normal in thickness and the mucosal surface is smooth. The bladder is moderately distended. A small to moderate amount of suspended echogenic debris is observed within the lumen. No cystic calculi are observed. The region of the trigone is normal.

The left kidney is normal in size (5.44 cm in length) with a normal shape, smooth peripheral margins, and normal internal architecture. There is mild loss of corticomedullary distinction. Several small cortical cysts are seen (the largest measuring 0.41 cm in diameter). Several hyperechoic shadowing diverticular foci are observed. Pinpoint hyperechoic foci are observed within the cortex. Moderate pyelectasia is present (0.40 cm in the longitudinal plane). There is no evidence of infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal in size (5.35 cm in length) with a normal shape, smooth peripheral margins, and normal internal architecture. There is mild loss of corticomedullary distinction. Several small cortical cysts are seen (the largest measuring 0.41 cm in diameter). Several hyperechoic shadowing diverticular foci are observed. Pinpoint hyperechoic foci are observed within the cortex. Trace pyelectasia is present. There is no evidence of infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is mildly enlarged (0.40 cm at cranial pole) (0.52 cm at caudal pole) (1.49 cm in length) with a slightly irregular shape. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

The right adrenal gland is mildly enlarged (0.83 cm at cranial pole) (0.57 cm at caudal pole) with a slightly irregular shape. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

Spleen

The spleen is normal in size (1.31 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. A few small, ill-defined hyperechoic nodules are observed. Splenic vasculature is normal.

Liver

The liver is subjectively prominent to enlarged with swollen peripheral contours. The parenchyma is isoechoic relative to the spleen and subtly mottled in appearance. A 0.57 cm anechoic cyst is observed deep on the left side. The lesion causes slight capsular expansion. At least one hyperechoic nodule (1.16 cm) is observed on the right side, along with ill-defined hyperechoic areas on the left. A 2.29 cm ill-defined hypoechoic nodule/mass is also observed adjacent to the diaphragm. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion. The portal vein to caudal vena cava ratio is approximately 1: 1.

The gall bladder lumen is moderately distended. The wall is thin and smooth. Luminal contents are anechoic. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is not distended. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall is normal in thickness with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. There is no evidence of an obstructive pattern.

Pancreas

The right limb of the pancreas is visible with normal curvilinear peripheral contours. The parenchyma is largely isoechoic relative to surrounding omental fat and slightly mottled in appearance. The pancreatic duct is visible but not overtly dilated. There is no evidence of peripancreatic inflammation or effusion.

Free Abdomen

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

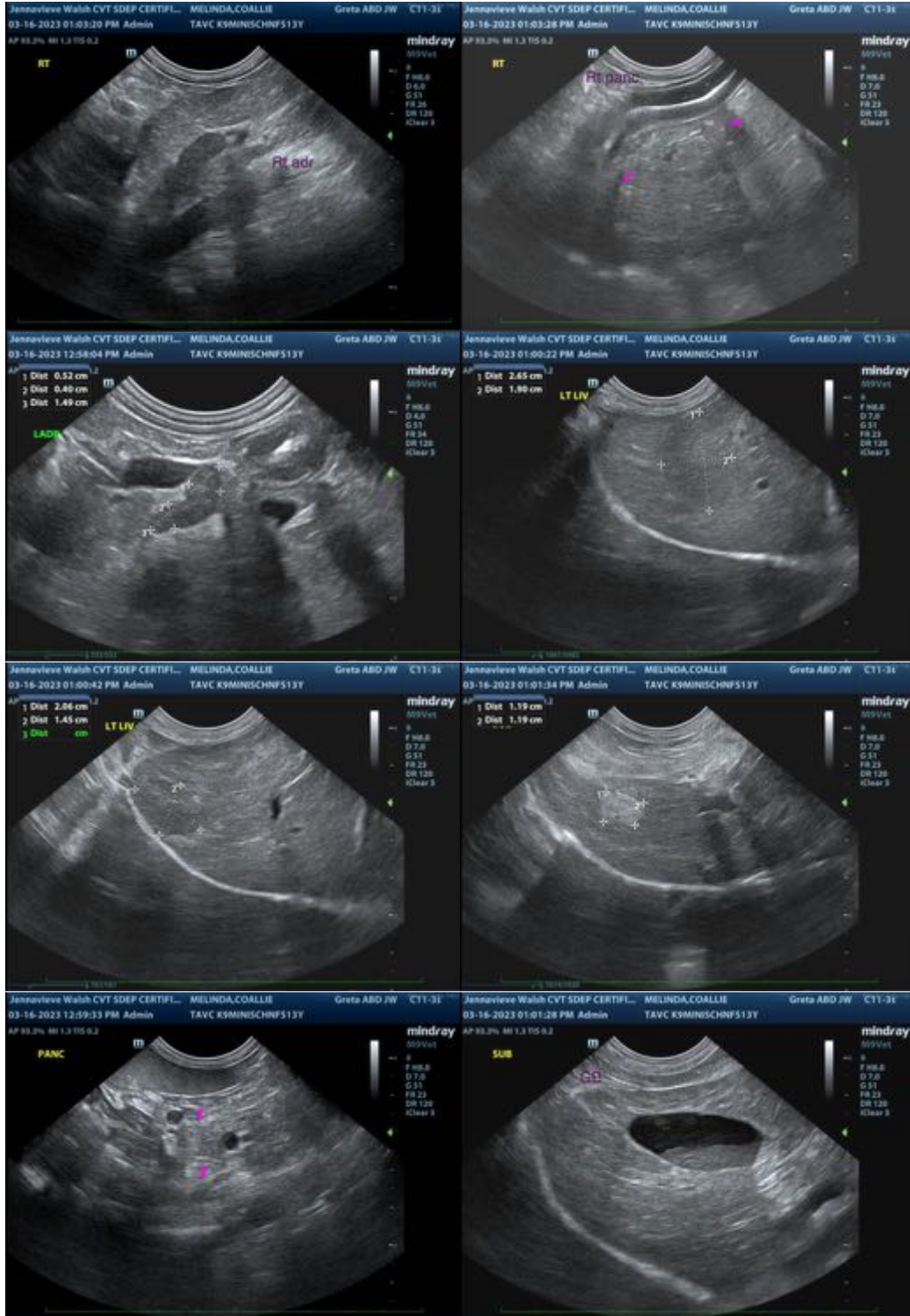
- The hepatic parenchymal changes, including the nodules, trend toward the benign (i.e., regenerative nodular hyperplasia +/- concurrent vacuolar hepatopathy). However, emerging neoplasia (particularly with regard to the hypoechoic nodule adjacent to the diaphragm) cannot be completely excluded.
- Gall bladder debris - non-mucocele

Secondary Findings

- Mild bilateral adrenomegaly
- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.
- The hyperechoic lesions adjacent to the splenic vessels are most consistent with myelolipomas. Although a neoplastic process within the spleen cannot be excluded, it is considered unlikely in this patient.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Fine-needle aspirates of the hepatic nodules can be considered (if clotting status is appropriate). Twenty-five gauge-needles should be used. If aspirates are not pursued at this time, periodic monitoring (i.e., every 3 months) of the patient's liver values is recommended. If values continue to increase, a repeat abdominal ultrasound +/- hepatic tissue sampling may be warranted.
- Consider testing for hyperadrenocorticism with a low-dose dexamethasone suppression test or ACTH stimulation test if clinical signs (i.e., PU/PD) develop.





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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