

**DATE PRESENTING CLINICAL SIGNS**

7.22.2022 Presented for acute back pain, recheck labs show rising liver and gall bladder values. P has a hx of elevated LEs and gall bladder sludge with GGT elevations. Mild discomfort on spinal palpation at T-L junction.

PATIENT

Journey Kempse

Current Medications: Denamarin 225mg SID x 5yrs, Ursodiol 75mg SID x 4yrs, Tylosin 80mg BID x 5yrs
 Lab Results: CBC WNL. Chem: ALT 744 (prev. 147 8/2020), ALP 6808 (prev. 346 8/2020), GGT 219.

Date of Previous IntraPet Ultrasound: 7/29/20. See attached.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

SPECIES

Canine

Imaging Performed By: Andi Parkinson, BS, RDMS.

BREED

Chihuahua Mix

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**SEX**

Neutered Male

Urinary System

The **urinary bladder** wall is normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with mostly anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

AGE

9/29/2014

The **prostate** is not definitively visualized due to its pelvic location.

WEIGHT

19.2 lbs

The **left kidney** is normal size (4.35 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

The **right kidney** is normal in size (3.42 cm in length) with a normal shape, smooth peripheral margins, and normal internal architecture. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis.

INTERPRETED BY

Andrea Nicastro, DMV,
 Diplomate DACVIM
 (Small Animal
 Internal Medicine)

Adrenal Glands

The **left adrenal gland** is mildly enlarged (0.47 cm at cranial pole) (0.63 cm at caudal pole) (1.36 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

HOSPITAL NAME

Timonium Animal
 Hospital

The **right adrenal gland** is mildly enlarged (0.49 cm at cranial pole) (0.61 cm at caudal pole) (1.89 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

REFERRING VET

Dr. Montessi

Spleen

The **spleen** is normal in size (1.30 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

INVOICE

11261

Liver

The **liver** is subjectively enlarged with swollen, irregular peripheral contours. Several nodules/masses are observed throughout the organ, the largest measuring 6.80 cm (mid-liver). The largest mass is isoechoic relative to surrounding hepatic parenchyma. A few of the nodules are hypoechoic. A 2 cm mass on the right side is hyperechoic. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

The **gall bladder** lumen is moderately distended. The wall is thin and smooth. A small to moderate amount of aggregated, echogenic debris/sludge is observed and appears mostly adhered to the luminal surface. 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 thickness is normal 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/prominent with slightly irregular peripheral contours. The parenchyma is hyperechoic relative to surrounding omental fat and subtly mottled in appearance. No distinct focal lesions are observed. The pancreatic duct is not overtly dilated.

Free Abdomen

There is no evidence of free fluid. The abdominal **lymph nodes** are normal/not visible.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Multiple hepatic nodule/masses. Neoplasia (i.e., adenocarcinoma, round cell tumor) is considered likely, with a low possibility of benign pathology (i.e., multifocal inflammatory disease, regenerative nodular hyperplasia).

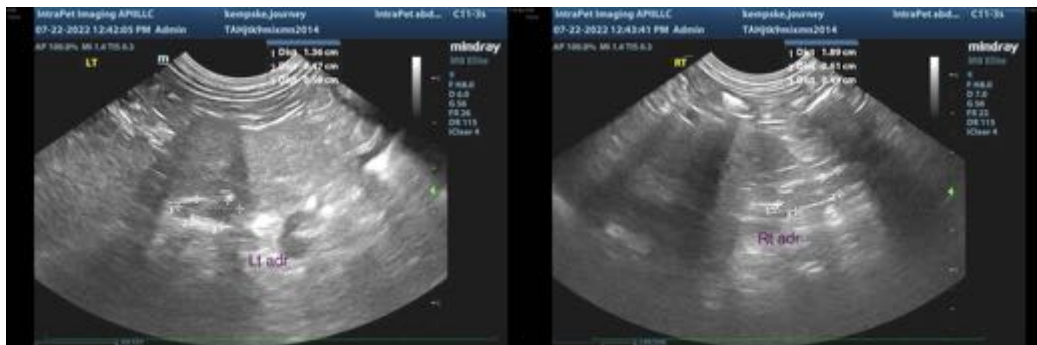
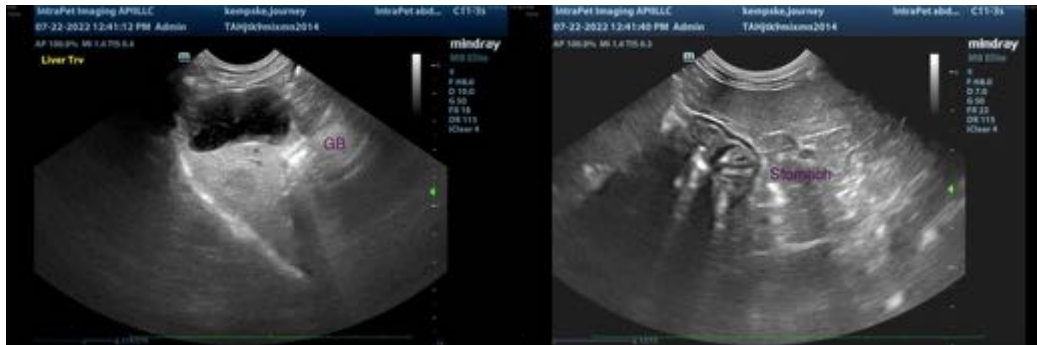
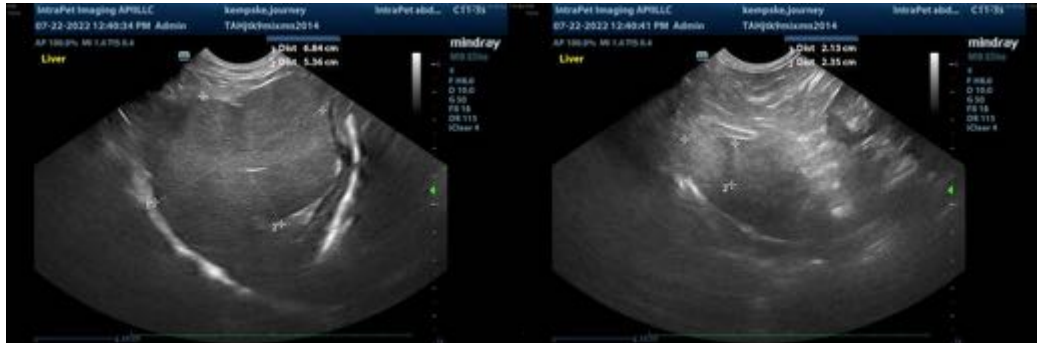
Secondary Findings

- Bilateral, chronic age-related renal changes with right dystrophic mineralization
- Borderline bilateral adrenomegaly
- Age-related pancreatic remodeling/fibrosis. Concurrent mild pancreatitis may also be present, particularly if the patient exhibits a positive Murphy's sign.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Three-view thoracic radiographs are recommended to assess for pulmonary metastases.

Fine-needle aspirates of the liver masses can be considered if clotting status is appropriate. Twenty-five gauge-needles should be used. It should be noted that hepatic cytology is useful in diagnosing round cell neoplasia but may be less beneficial in the diagnosis of other diseases (i.e., adenoma, adenocarcinoma).



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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