



PATIENT

Honey Rodriguez

SPECIES

Canine

BREED

Chihuahua

SEX

Intact Male

AGE

10 years

WEIGHT

6.3 lbs

INTERPRETED BY

Andrea Nicastro,
DVM, Diplomate ACVIM
(Small Animal Internal
Medicine)

**IMAGING
PERFORMED BY**

Dr. G. Ferrer, DVM

HOSPITAL NAME

Paseos VC

REFERRING VET

Dr. F. Ortiz Vidal,
DVM

INVOICE

10584

DATE

3/17/22

PRESENTING CLINICAL SIGNS

History: Presented for evaluation as Honey seems to be depressed and has been having decrease appetite. Pt has history of colitis and slight anorexia and mild weight loss. An abdominal ultrasound was done to further evaluate. General appear: Quiet and depressed Oral-Teeth: mild periodontal Dz Cardiovascular: no murmur Gastro-abdomen: bouts of colitis and finicky eater

Abnormal PE/Chem/CBC/UA Results: CBC: mild leukocytosis WBC 22.21 (5.05 - 16.76 K/ μ L) Neutrophils 21.19 (2.95 - 11.64 K/ μ L) Lymphocytes 0.68 (1.05 - 5.10 K/ μ L) CHEM: elevated liver enzymes Creat: 0.4 (0.5 - 1.8 mg/dL) ALT 813 (10 - 125 U/L) ALP 218 (23 - 212 U/L) GGT 29 (0 - 11 U/L) Amylase 498 (500 - 1,500 U/L) RADIOGRAPHS: r/o renomegaly and/or hepatomegaly

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, and pelvic urethra are 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.

The prostate is enlarged (2.05 cm in width) with a slightly irregular shape. The parenchyma is hyperechoic relative to surrounding omental fat and slightly heterogenous in appearance. A small amount subcapsular edema is observed adjacent to the corticomedullary junction. A few small, ill-defined cystic lesions re also observed at the cranial aspect of the gland. The prostatic urethra is not overtly dilated.

The left kidney is normal in size (4.61 cm in length); with an irregular shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. Mild pyelectasia is present (0.25 cm in the transverse plane). There is no evidence of nephroliths or hydroureter.

The right kidney is normal in size (4.10 cm in length); with an irregular shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. A small cortical cyst is observed at the lateral aspect. Mild pyelectasia is present (0.30 cm in the transverse plane). There is no evidence of nephroliths or hydroureter.

Adrenal Glands

The left adrenal gland is enlarged (0.52 cm at cranial pole) (0.79 cm at caudal pole) (1.90 cm in length); with a slightly irregular shape. A 0.96 x 0.74 cm hypoechoic nodule is observed at the caudal pole. The lesion causes capsular expansion. The nodule appears to be compressing, but not obviously invading the caudal vena cava. Glandular echogenicity and detail at the caudal pole are normal.

The right adrenal gland is normal size (0.86 cm at cranial pole) (0.47 cm at caudal pole) (1.73 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.

Spleen

The spleen is subjectively prominent in size (0.99 cm in width at the level of the hilus) with slightly irregular peripheral contours. The parenchyma is mottled in appearance. No distinct focal lesions are observed. Splenic vasculature appears normal with no evidence of thrombosis.



PATIENT

Honey Rodriguez

SPECIES

Canine

BREED

Chihuahua

SEX

Intact Male

AGE

10 years

WEIGHT

6.3 lbs

INTERPRETED BY

Andrea Nicastro,
DVM, Diplomate ACVIM
(Small Animal Internal
Medicine)

IMAGING PERFORMED BY

Dr. G. Ferrer, DVM

HOSPITAL NAME

Paseos VC

REFERRING VET

Dr. F. Ortiz Vidal,
DVM

INVOICE

10584

DATE

3/17/22

Liver

The liver is subjectively prominent size with swollen peripheral contours, particularly in the region of the right lateral lobe. The parenchyma is isoechoic relative to the spleen and mildly heterogenous in appearance. No distinct focal lesions are observed. 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, mostly gravity dependent debris/sludge is observed within the lumen. The cystic and common bile ducts are normal.

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 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. No obstructive or overt infiltrative disease is noted.

Pancreas

The base and right limb of the pancreas are visible with normal curvilinear peripheral contours. The parenchyma is largely hyperechoic 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

Trace free fluid is observed. A 0.86 cm medial iliac lymph node is visualized. A few prominent mesenteric lymph nodes are also seen, the largest measuring 0.65 cm in length.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Nonspecific diffuse hepatopathy. Given the sonographic changes and the elevated liver enzymes, top differentials include inflammatory hepatopathy (i.e., bacterial cholangiohepatitis, chronic active hepatitis), hepatotoxicosis (i.e., copper), infiltrative neoplasia (i.e., lymphoma), other hepatopathy +/- concurrent age-related change (i.e., regenerative nodular hyperplasia, and/or vacuolar hepatopathy).
- Gall bladder debris/sludge, non-mucocele
- The splenic parenchymal changes could be consistent with a benign process (i.e., lymphoid hyperplasia or extramedullary hematopoiesis). However, infiltrative neoplasia (i.e., lymphoma), is also a possibility.
- Trace ascites

Secondary Findings

- Age-related pancreatic remodeling/fibrosis. Concurrent mild pancreatitis may also be present, particularly if the patient is exhibiting pain on cranial abdominal palpation.
- The lymph node changes are most consistent with reactive lymphadenitis or lymphoid hyperplasia.



PATIENT

Honey Rodriguez

- Bilateral degenerative renal changes with mild pyelectasia
- The left adrenal nodule could be consistent with nodular hyperplasia or an emerging tumor.

SPECIES

Canine

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

BREED

Chihuahua

- Given the hepatic and splenic changes, fine-needle aspirates of both organs are recommended, if clotting status is appropriate. Twenty-five gauge needles should be used.
- Also consider Leptospirosis testing (i.e., blood and urine PCR, serology), particularly if the disease is endemic in the patient's geographic region.
- If the above diagnostics are inconclusive, a surgical biopsy with aerobic and anaerobic bile cultures and acquisition of additional hepatic tissue samples for potential copper quantitation may be necessary to get a definitive diagnosis. Three-view thoracic radiographs are recommended to assess cardiopulmonary status prior to anesthesia.
- In the meantime, consider empirical treatment for bacterial cholangiohepatitis and Leptospirosis (i.e., amoxicillin-clavulanic acid +/- Metronidazole, Denamarin). Also consider initiation of Ursodiol therapy for its antioxidant effects.

SEX

Intact Male

AGE

10 years

WEIGHT

6.3 lbs

INTERPRETED BY

Andrea Nicastro,
DVM, Diplomate ACVIM
(Small Animal Internal
Medicine)

**IMAGING
PERFORMED BY**

Dr. G. Ferrer, DVM

HOSPITAL NAME

Paseos VC

REFERRING VET

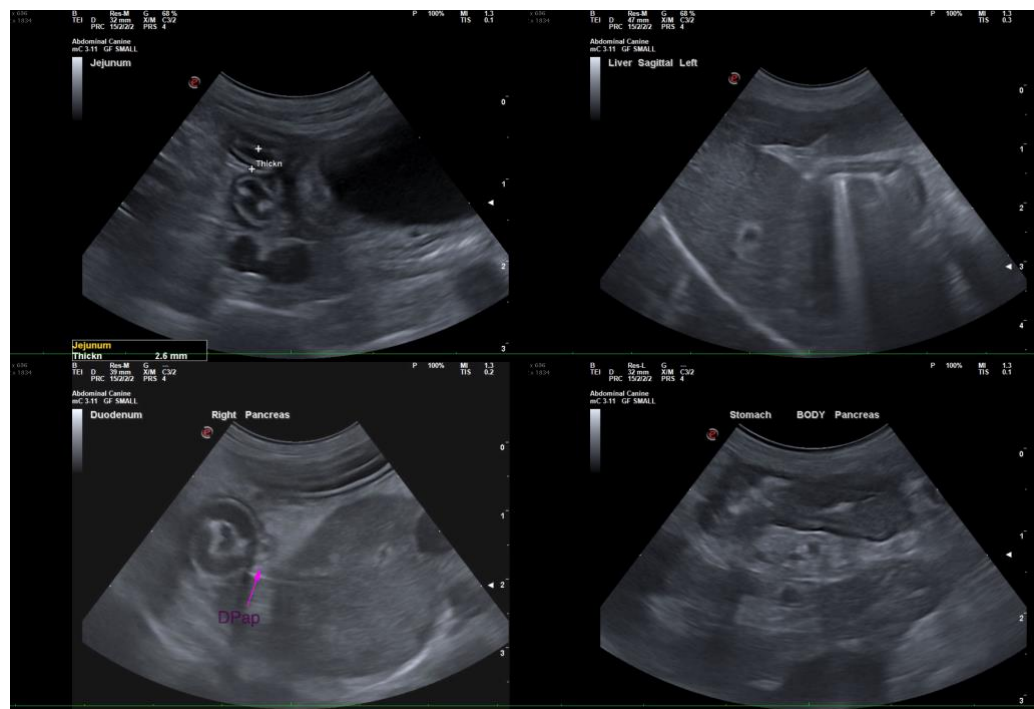
Dr. F. Ortiz Vidal,
DVM

INVOICE

10584

DATE

3/17/22





PATIENT

Honey Rodriguez

SPECIES

Canine

BREED

Chihuahua

SEX

Intact Male

AGE

10 years

WEIGHT

6.3 lbs

INTERPRETED BY

Andrea Nicastro,
DVM, Diplomate ACVIM
(Small Animal Internal
Medicine)

IMAGING PERFORMED BY

Dr. G. Ferrer, DVM

HOSPITAL NAME

Paseos VC

REFERRING VET

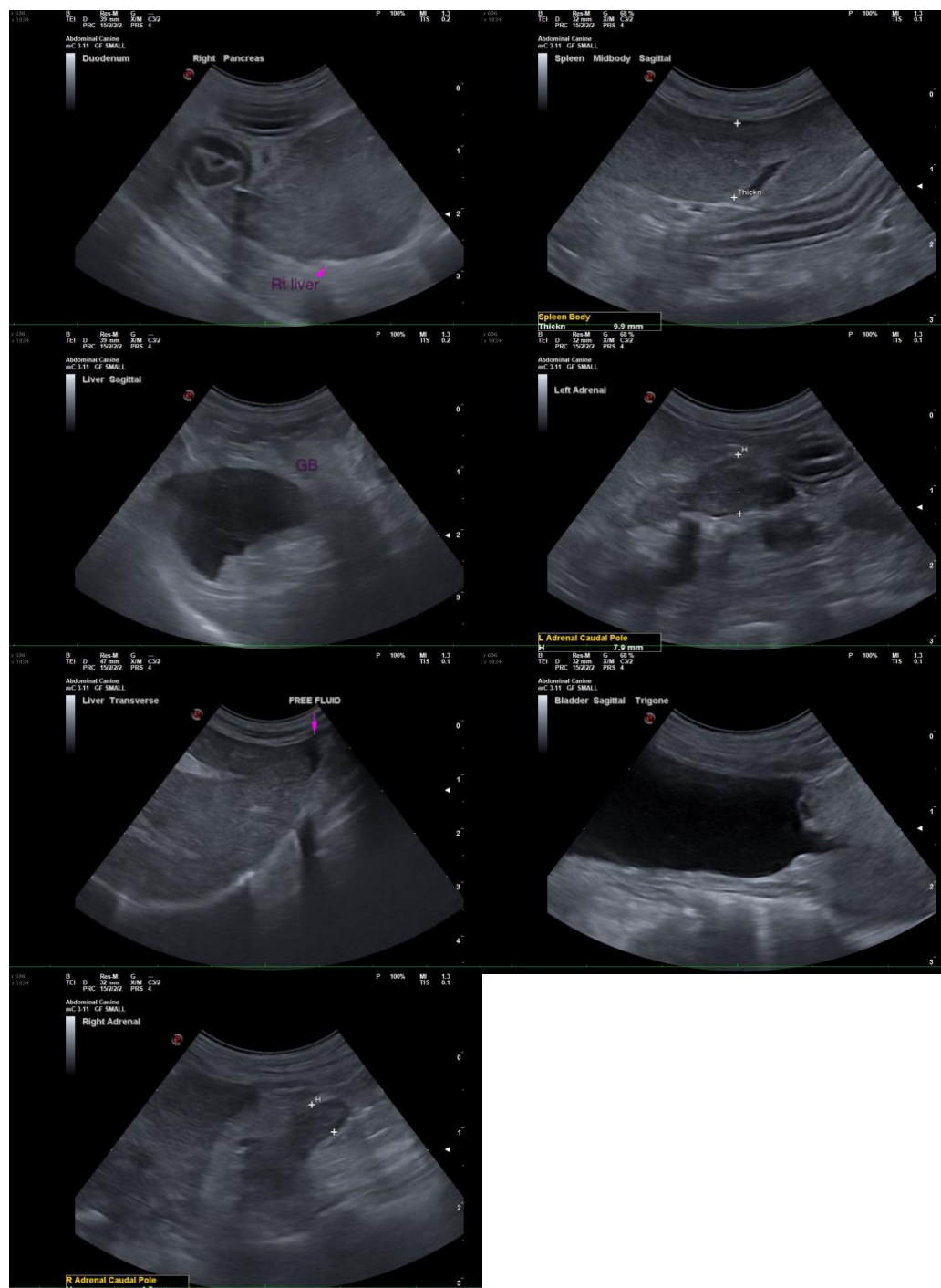
Dr. F. Ortiz Vidal,
DVM

INVOICE

10584

DATE

3/17/22



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.



PATIENT

Honey Rodriguez

Andrea Nicastro, DVM, Diplomate DACVIM (Small Animal Internal Medicine)
info@SonoPath.com

SPECIES

Canine

BREED

Chihuahua

SEX

Intact Male

AGE

10 years

WEIGHT

6.3 lbs

INTERPRETED BY

Andrea Nicastro,
DVM, Diplomate ACVIM
(Small Animal Internal
Medicine)

**IMAGING
PERFORMED BY**

Dr. G. Ferrer, DVM

HOSPITAL NAME

Paseos VC

REFERRING VET

Dr. F. Ortiz Vidal,
DVM

INVOICE

10584

DATE

3/17/22