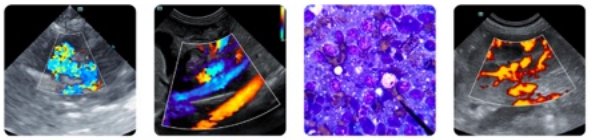


PATIENT

George Wright

SPECIES

Ferret

BREED

Ferret

SEX

Neutered male

AGE

5 years

WEIGHT

1.16 kg

INTERPRETED BY

Alicia Angosto Guerrero, DMV, PgDip, MSc.

IMAGING PERFORMED BY

Amanda Stewart

HOSPITAL NAME

Preston AC

REFERRING VET

Dr. Coghlan

INVOICE

73831

DATE

PRESENTING CLINICAL SIGNS

- Presented for lethargy, inappetence, dark orange urine, abdominal tenderness, splenomegaly
- Current Medications: none

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is normally distended, with a thin and smooth wall. The urine is anechoic. The bladder neck and proximal urethra appear normal. No calculi or sonographic evidence of inflammatory or neoplastic changes are identified.

The left kidney is normal in shape and size, measuring 2.88×1.41 cm. Cortical thickness is 0.26 cm in the sagittal plane. The cortex is isoechoic compared to the liver parenchyma. The corticomedullary ratio and definition are preserved. No pyelectasia, nephrolithiasis, or hydronephrosis is identified. Color Doppler shows a normal vascular pattern.

The right kidney is normal in shape and size, measuring 3.04×1.49 cm. The cortex is isoechoic compared to the liver parenchyma. The corticomedullary ratio and definition are preserved. No pyelectasia, nephrolithiasis, or hydronephrosis is identified. Color Doppler shows a normal vascular pattern.

Adrenal Glands

Dorsoventral diameters measured in the sagittal plane: The left adrenal gland measures 0.44 cm at the cranial pole and 0.41 cm at the caudal pole, normal shape and echogenicity. The right adrenal gland is enlarged, measuring 0.70×0.55 cm, and appears hypoechoic and mildly heterogeneous.

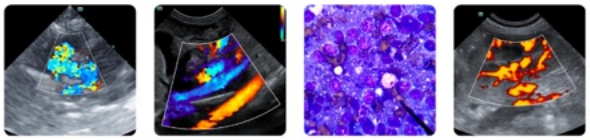
Spleen

The spleen is mildly enlarged (thickness 1.26 cm) with rounded margins. The parenchyma is homogeneous without focal lesions. The capsule is smooth and regular.

Liver

The liver is subjectively normal in size, with sharp margins and regular contour. The parenchyma is homogeneous and isoechoic relative to falciform fat, with a coarse echotexture. No hepatic lymphadenopathy is identified.

The gallbladder is poorly distended. The wall appears thickened (2.20 mm), although this may be overestimated due to underdistension. The contents are predominantly anechoic with a small amount of biliary sludge. No dilation of the cystic duct or common bile duct is identified.



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Gastrointestinal

The stomach is empty and folded, with a wall thickness of 1.62 mm and preserved layering. The pylorus measures 1.95 mm.

The duodenum measures 0.83 mm and the jejunum 1.34 mm. Wall layering is preserved. No evidence of inflammation, ileus, or intraluminal foreign material is identified.

The colon measures 0.39 mm and contains formed feces in the descending segment.

Pancreas

The pancreas is partially visualized. It measures 4.84 mm in thickness. The parenchyma is isoechoic relative to surrounding mesenteric fat. No sonographic evidence of inflammation or focal lesions is identified at the evaluated portion.

Free Abdomen

No abdominal effusion or peritonitis is observed.

Cranial mesenteric lymph nodes measure approximately 1.13×0.59 cm and are within normal shape and echogenicity.

Hepatic lymph nodes are enlarged (up to 1.03×0.66 cm), rounded and hypoechoic.

Gastric lymph nodes are mildly enlarged, rounded, and hypoechoic to anechoic.

PRIMARY FINDINGS

- Right adrenal enlargement, rounded shape and mild heterogeneity.
- Splenomegaly with rounded margins.
- Enlarged, rounded hypoechoic hepatic and gastric lymph nodes.
- Mild biliary sludge ± apparent gallbladder wall thickening.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Mild splenomegaly is present, with a homogeneous echotexture and rounded margins. In ferrets, this is a common finding and is most often associated with extramedullary hematopoiesis or lymphoid hyperplasia, which may represent physiologic or reactive processes.

The abdominal lymph nodes are mildly enlarged and predominantly distributed within the hepatopancreatic region. Their appearance is nonspecific but may reflect reactive changes, particularly in the context of hepatobiliary or pancreatic disease. Anechoic or cystic changes within lymph nodes are thought to represent sinus ectasia, likely secondary to antigenic stimulation, and are commonly reported in ferrets.

The gallbladder wall thickening and the presence of mild biliary sludge may support hepatobiliary

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disease (cholecystitis and or cholangitis). In ferrets, these conditions may be associated with regional lymphadenopathy, particularly affecting hepatic, pancreatic, and gastric lymph nodes.

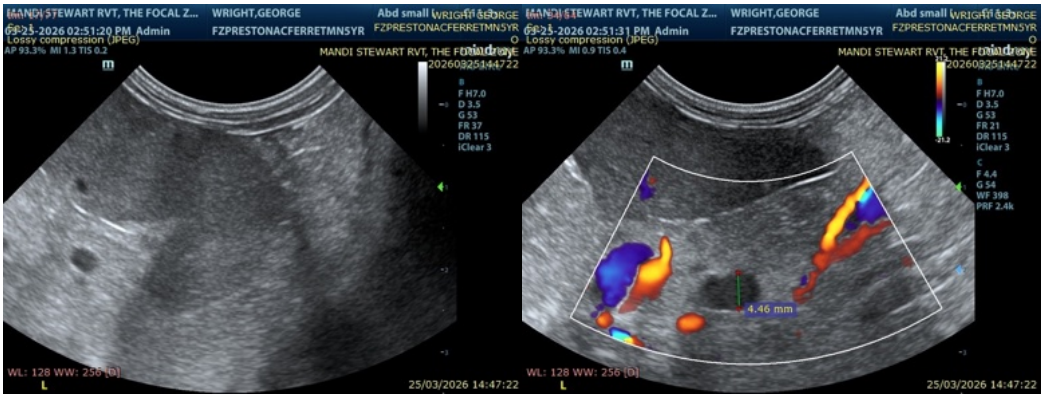
The right adrenal gland is enlarged and mildly heterogeneous, which is compatible with adrenal disease, a common condition in this species. This finding may be incidental or represent a concurrent process and should be interpreted in light of clinical signs.

Importantly, there is no evidence of generalized lymphadenopathy, abdominal masses, cavitary effusion, or a diffuse multinodular splenic pattern. Therefore, although early or incipient lymphoma can never be completely excluded based on ultrasonography alone, there are currently no sonographic findings that are pathognomonic for, or strongly supportive of, lymphoma in this patient.

Recommendations

- Complete laboratory evaluation: full hematology and biochemistry are strongly recommended to allow proper interpretation of the imaging findings. Particular attention should be given to liver enzymes, bile parameters, glucose levels, and overall metabolic status, especially in the context of lethargy. Insulinoma cannot be excluded, as pancreatic nodules are often not detectable on ultrasound in ferrets.
- Adrenal disease: Correlate right adrenal enlargement with clinical findings. If not already in place, medical management with a deslorelin implant should be considered. Follow-up ultrasound is recommended to reassess adrenal size and morphology and to evaluate response to hormonal therapy, as neoplastic lesions typically do not respond and may continue to increase in size.

Final diagnostic and therapeutic decisions should be made by the attending veterinarian, who can best integrate these findings with the patient's clinical status.



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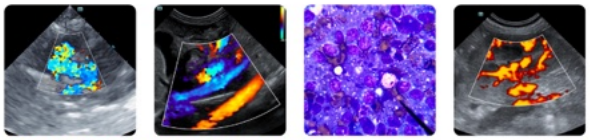

Clinical Sonography & Telecytology
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SonoPath.com info@sonopath.com 1.800.838.4268

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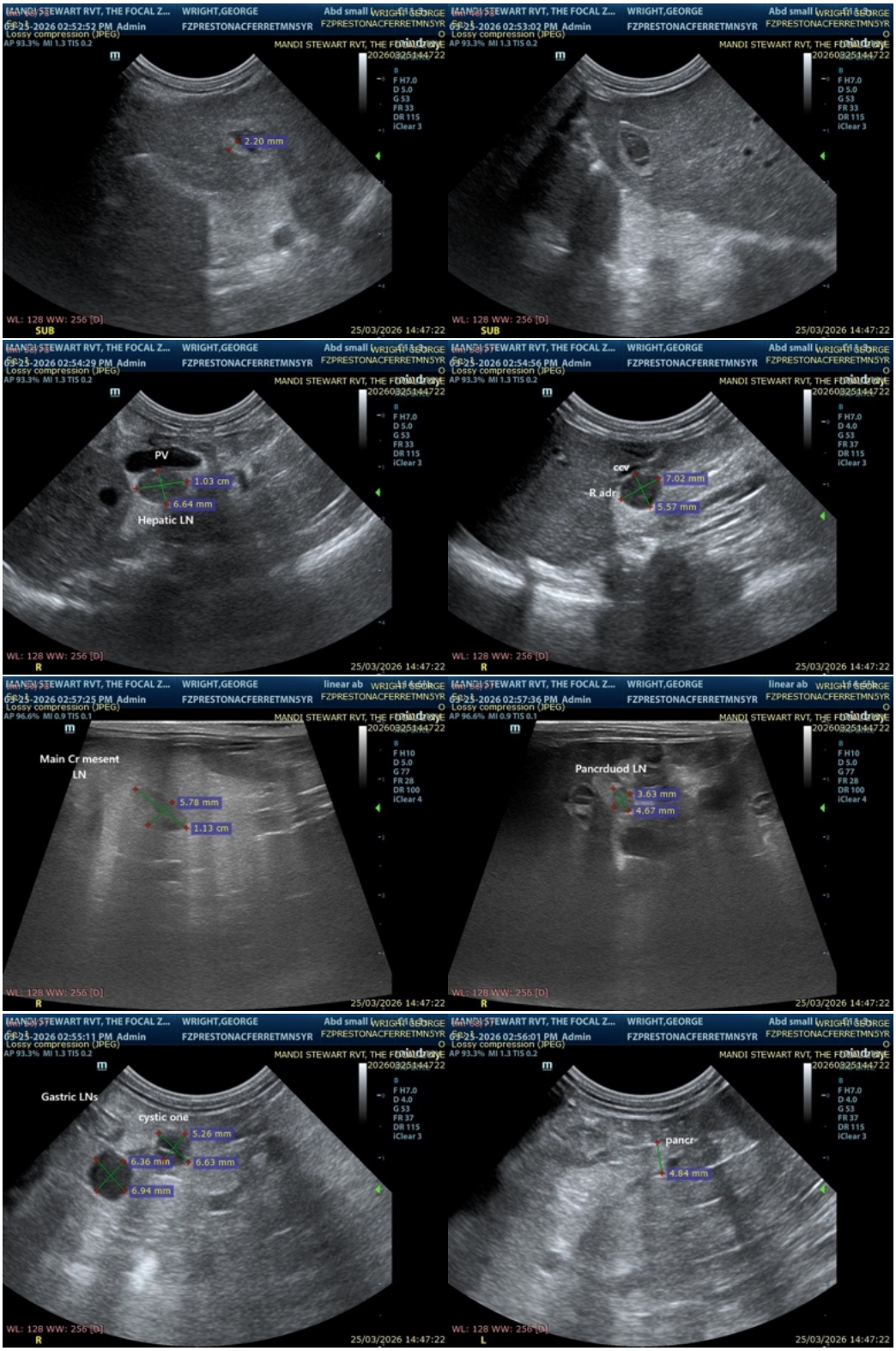

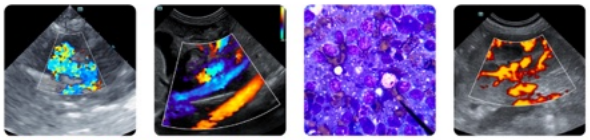

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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Alicia Angosto Guerrero, DMV, PgDip, MSc.

info@SonoPath.com