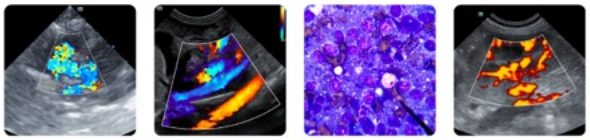


PATIENT

Kopono Arnold

SPECIES

Feline

BREED

Domestic Shorthair

SEX

Neutered male

AGE

9 years

WEIGHT

17.4 lbs

INTERPRETED BY

Dr. Alicia Angosto Guerrero

IMAGING PERFORMED BY

Grace Jayne CVT

HOSPITAL NAME

Ark Animal Homecare

REFERRING VET

Dr. Dingle

INVOICE

73506

DATE

3/17/26

PRESENTING CLINICAL SIGNS

- Presented to holistic clinic for decreased appetite and drinking-duration not notated.
- Grade III-IV systolic murmur with normal rhythm.
- Heart murmur
- Hyporexia
- Snoring
- Occasional cough
- Lipemic serum sample
- Historically FIV positive
- Total protein 9.5 Albumin 4.2 AST 104 ALP <1 GGT 12 Total bili 0.4 Conjugated 0.2 Unconjugated 0.2 Na 146 Chloride 112 PLT >83 Neutrophils 1.64 Chest x-ray findings: -The patient's reported sneezing suggests upper airway related pathology. Nasal cavity pathology may be considered given his history. It is also possible that the patient's reported coughing could be associated with upper airway associated pathology as well. - The enlarged liver could be associated with a benign/metabolic versus, less likely, a neoplastic or infectious hepatopathy. -The visibility of the spleen within the ventral aspect of the middle abdomen on some of the lateral images may be related to incidental congestion. Extramedullary hematopoiesis/hyperplasia is also possible.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

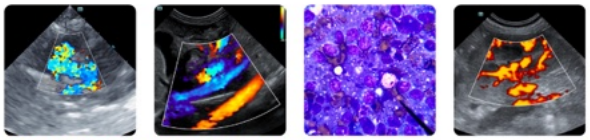
The bladder lumen is normally distended, and the wall appears thin and smooth. The urine is predominantly anechoic with scant suspended echoes. The bladder neck and proximal urethra have a normal appearance. There are no calculi and no sonographic evidence of inflammatory or neoplastic changes.

The left kidney is normal in shape and size, measuring 4.49×2.93 cm. Cortical thickness is 0.41 cm in the sagittal plane. The cortex is isoechoic relative to the hepatic parenchyma. The corticomedullary ratio is normal, and corticomedullary definition is preserved. There is no evidence of pyelectasia, nephrolithiasis, or hydronephrosis. Color Doppler shows a normal vascular pattern.

The right kidney is normal in shape and size, measuring 4.29×3.07 cm. Cortical thickness is 0.45 cm in the sagittal plane. The cortex is isoechoic relative to the hepatic parenchyma. The corticomedullary ratio is normal, and corticomedullary definition is preserved. There is no evidence of pyelectasia, nephrolithiasis, or hydronephrosis. Color Doppler shows a normal vascular pattern.

Adrenal Glands

The left adrenal gland shows normal shape and echogenicity, measuring 0.26 cm at the cranial pole and 0.29 cm at the caudal pole. The right adrenal gland is not confidently visualized.



PATIENT

Kopono Arnold

SPECIES

Feline

BREED

Domestic Shorthair

SEX

Neutered male

AGE

9 years

WEIGHT

17.4 lbs

INTERPRETED BY

Dr. Alicia Angosto Guerrero

IMAGING PERFORMED BY

Grace Jayne CVT

HOSPITAL NAME

Ark Animal Homecare

REFERRING VET

Dr. Dingle

INVOICE

73506

DATE

3/17/26

Spleen

Splenic thickness ranges from 0.98–1.07 cm. The parenchyma demonstrates normal echogenicity and a fine homogeneous echotexture without focal abnormalities. The splenic capsule is smooth and regular.

Liver

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

The gallbladder lumen is normally distended. The wall is thin, and the contents are predominantly anechoic with a small amount of biliary sludge. The common bile duct measures 2.27–1.90 mm.

Gastrointestinal

The stomach is partially empty, containing a small amount of residual digested ingesta. Gastric wall thickness is 1.28 mm, with preserved layering.

Duodenum: 1.83 mm. Jejunum: 2.16 mm, with mucosa 1.08 mm, submucosa 0.60 mm, and muscularis propria 0.37 mm. Ileum: 1.78 mm, with mucosa 0.58 mm, submucosa 0.61 mm, and muscularis propria 0.54 mm. Wall layering is preserved throughout. The ileocecal junction was not visualized. No signs of overt inflammation, ileus, or foreign material are identified.

Colon: 1.01 mm, with formed feces in the descending segment.

Pancreas

The evaluated pancreatic regions do not show evidence of overt inflammation or focal lesions.

Peritoneal Cavity

There is no sonographic evidence of abdominal effusion, peritonitis, or lymphadenomegaly. The region of the iliac trifurcation appears normal.

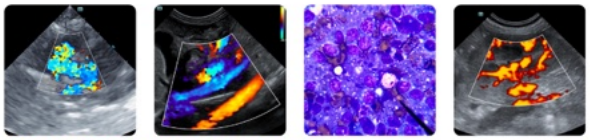
ULTRASONOGRAPHIC FINDINGS

PRIMARY FINDINGS

- Muscularis-to-mucosa ratio in the ileum approaches 0.93.

SECONDARY FINDINGS

- Mild biliary sludge



PATIENT

Kopono Arnold

SPECIES

Feline

BREED

Domestic Shorthair

SEX

Neutered male

AGE

9 years

WEIGHT

17.4 lbs

INTERPRETED BY

Dr. Alicia Angosto Guerrero

IMAGING PERFORMED BY

Grace Jayne CVT

HOSPITAL NAME

Ark Animal Homecare

REFERRING VET

Dr. Dingle

INVOICE

73506

DATE

3/17/26

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is no sonographic evidence of lymphadenomegaly, organ infiltration, or effusion to support lymphoma, disseminated inflammation, or effusive processes such as FIP.

The liver appears sonographically normal. It is important to note that hepatic size is more reliably assessed radiographically than ultrasonographically. On this examination, there is no evidence of hepatomegaly based on ultrasonographic criteria, as the liver does not appear to extend beyond the gastric lesser curvature, and the margins remain sharp rather than rounded. No structural hepatopathy is identified. Mild biliary sludge is present and is considered an incidental and nonspecific finding in this context. The common bile duct diameter (≤2.27 mm) is within normal limits for a cat (typically <3–4 mm), with no evidence of biliary obstruction.

The gastrointestinal tract is within normal limits in thickness and layering. In cats, small intestinal wall thickness is generally ≤2.5–3.0 mm, placing all segments within normal limits. Muscularis-to-mucosa ratio in the jejunum is approximately 0.34 (0.37/1.08), which is within normal limits (<0.5). In the ileum, the ratio approaches 0.93 (0.54/0.58), which appears relatively increased; Importantly, there is no diffuse muscularis thickening, no loss of layering, and no associated lymphadenopathy. Therefore, there are no convincing ultrasonographic features to support small cell lymphoma or clinically significant inflammatory bowel disease. That said, ultrasound cannot exclude early or mild chronic enteropathy, which remains a differential given the clinical signs.

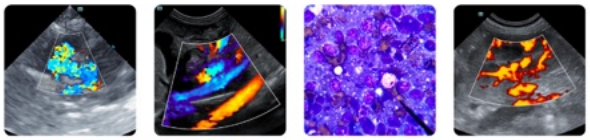
Overall, this is a negative abdominal ultrasound in the context of systemic abnormalities (hyperproteinemia, FIV positivity), which may shift the diagnostic focus toward functional, hematologic, infectious, or early infiltrative processes not detectable with ultrasound.

Recommendations

- Given hyperproteinemia, consider serum protein electrophoresis to differentiate polyclonal versus monoclonal gammopathy, particularly in the context of FIV infection.
- A gastrointestinal panel (cobalamin, folate, feline pancreatic lipase immunoreactivity) is reasonable to further assess functional enteropathy and pancreatic disease.
- Correlate with further evaluation of upper respiratory signs if clinically indicated, as these are not explained by abdominal findings.
- If clinical suspicion persists for infiltrative or infectious disease despite negative imaging, additional testing (infectious disease screening, bone marrow evaluation) may be considered.

Final diagnostic and therapeutic decisions should be made by the attending veterinarian, based on the complete clinical context.

SonoPath
FOSTERING THE ART OF VETERINARY MEDICINE™



Clinical Sonography & Telecytology
Educational Teleconsultation Services™

SonoPath.com | info@sonopath.com | 1.800.838.4268

PATIENT

Kopono Arnold

SPECIES

Feline

BREED

Domestic Shorthair

SEX

Neutered male

AGE

9 years

WEIGHT

17.4 lbs

INTERPRETED BY

Dr. Alicia Angosto Guerrero

IMAGING PERFORMED BY

Grace Jayne CVT

HOSPITAL NAME

Ark Animal Homecare

REFERRING VET

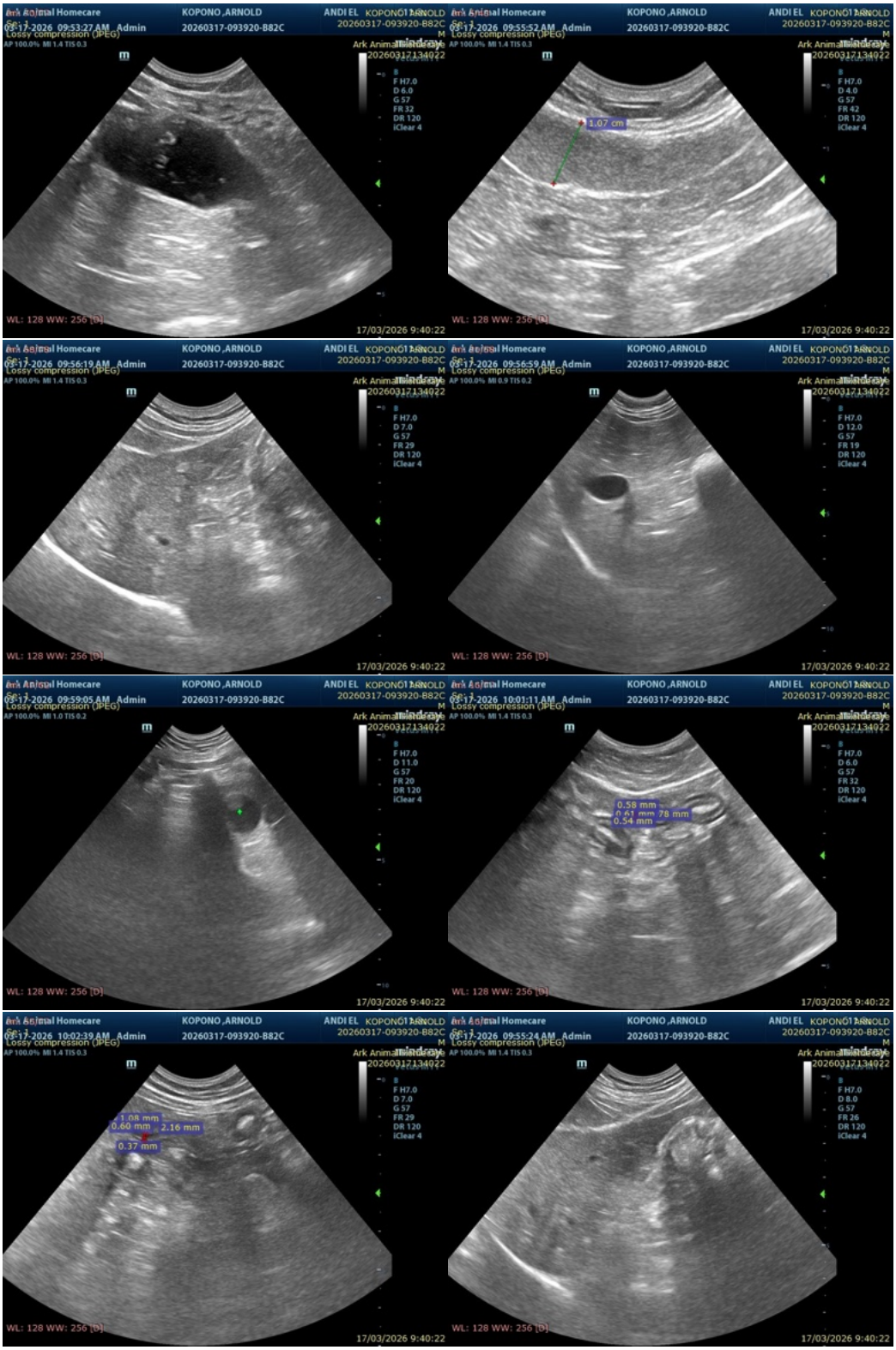
Dr. Dingle

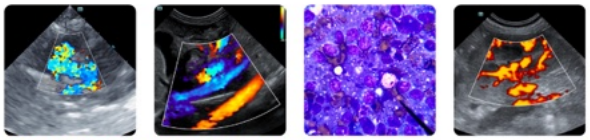
INVOICE

73506

DATE

3/17/26





PATIENT

Kopono Arnold

SPECIES

Feline

BREED

Domestic Shorthair

SEX

Neutered male

AGE

9 years

WEIGHT

17.4 lbs

INTERPRETED BY

Dr. Alicia Angosto Guerrero

IMAGING PERFORMED BY

Grace Jayne CVT

HOSPITAL NAME

Ark Animal Homecare

REFERRING VET

Dr. Dingle

INVOICE

73506

DATE

3/17/26

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.

MV Esp Ultrasound in Domestic and Wild Animals

info@SonoPath.com