

**DATE PRESENTING CLINICAL SIGNS**

12/19/22

PATIENT

Chloe Ivill

SPECIES

Canine

BREED

Pug

SEX

Spayed Female

AGE

5/25/2005

WEIGHT

14.8 Pounds

INTERPRETED BYEric Lindquist, DMV
DABVP, Cert. IVUSS**HOSPITAL NAME**Animal Emergency
Hospital**REFERRING VET**

Dr. Martinoli

INVOICE

20211

History: Hx of chronic cough/airway disease, Is on prednisone 2.5 mg po SID am
Is on Hydrocodone po SID pm. We saw in 2020 for flare up after car ride from FL. Hypoplastic trachea/collapse
, increase ALKP. 4/2021-- unknown hepatopathy and neurological issues—resolved. Has had echo as heart
appeared large on films, but No cardiac disease diagnosed
CURRENT PRESENTATION: Acute Respiratory Distress- /choking on phlegm with RDVM; Presented with
increase in RR and effort. Rads- heart is very large, but no murmur , increase bronchiolar pattern/possible
mild aspiration. Stomach is very large with what appears to be large hydrated pieces of ingesta. Labs ALT 234
, ALkP >2000, mild non regenerative anemia, increase WBC. Progress: Still having abdominal effort
intermittently, but off oxygen, Stomach is not emptying with time/reglan and IVF. No vomiting, eating little
bits. After a day , noted no longer willing to stand and walk , still weak, but a able stand on day 3
Hx of otitis, ears have medication in them

Current Medications: Metoclopramide, Doxycycline, Gentamicin, Hydrocodone, Cerenia, Prednisone.

Lab Results: See attached.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Rachel Brillhart, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The **urinary bladder**, trigone, and pelvic urethra presented normal thicknesses and normal tone. The ureters
were not visible which is normal. No uroliths or sediment were visualized, and anechoic urine was present.
No evidence of inflammatory or neoplastic changes were noted. Ureteral papillae were normal.

The **kidneys** revealed largely normal size and structure, corticomedullary definition and ratio (cortex 1/3 of
medulla) were essentially maintained with some age-related loss of curvilinear patterns regarding the
capsule and C/M junction. The cortices presented largely uniform texture with some increased echogenicity
expected for his age patient. Medullary structure differed distinctly from that of the cortex and no evidence
of pelvic dilation was present. Mineralization was noted in the kidneys. The right kidney revealed moderate
degenerative changes. Calculi were noted, measuring up to 0.6 cm in the right kidney. An anechoic cyst
was noted, measuring 6.0 mm. The left kidney revealed minor degenerative changes with corticomedullary
calculi.

Adrenal Glands

The **left adrenal gland** revealed nodular mixed echogenic changes. A 1.9 cm x 1.57 cm nodule was noted
at the cranial pole. The caudal pole measured 0.65 cm. This is concerning for carcinoma or
pheochromocytoma

The **right adrenal gland** revealed a hyperechoic nodule at the cranial pole. The right adrenal gland
measured 1.07 cm x 0.83 cm at the cranial pole and 0.58 cm at the caudal pole. This is likely adenoma.

Spleen

The **spleen** presented a smooth homogeneous parenchyma hyperechoic to liver and renal cortical
parenchyma. The capsule was smooth without noticeable expansion or deviation from within the spleen or

adjacent pathology. The splenic vasculature demonstrated normal volume without signs of congestion or thrombosis. No sonographic evidence of acute or chronic inflammatory, neoplastic, or infarctual changes were noted.

Liver

The **liver** presented heterogenous parenchyma with increased portal markings and coarse architecture. Slight undulating capsular contour was noted. This is a mild change, consistent with chronic inflammatory hepatopathy. The gallbladder was overdistended with a rounded appearance and some striating bile, consistent with emerging mucocele. Lobar biliary mineralization was also noted in the liver.

Gastrointestinal

Examination of the **gastrointestinal tract** revealed a stomach and intestine free of stasis, of normal wall thickness, acceptable curvilinear mural detail, and peristaltic activity. Small and large intestine demonstrated normal luminal chyme and stool consistency respectively. No obstructive or overt infiltrative disease was noted. No associated abnormal lymphatic activity was noted.

Pancreas

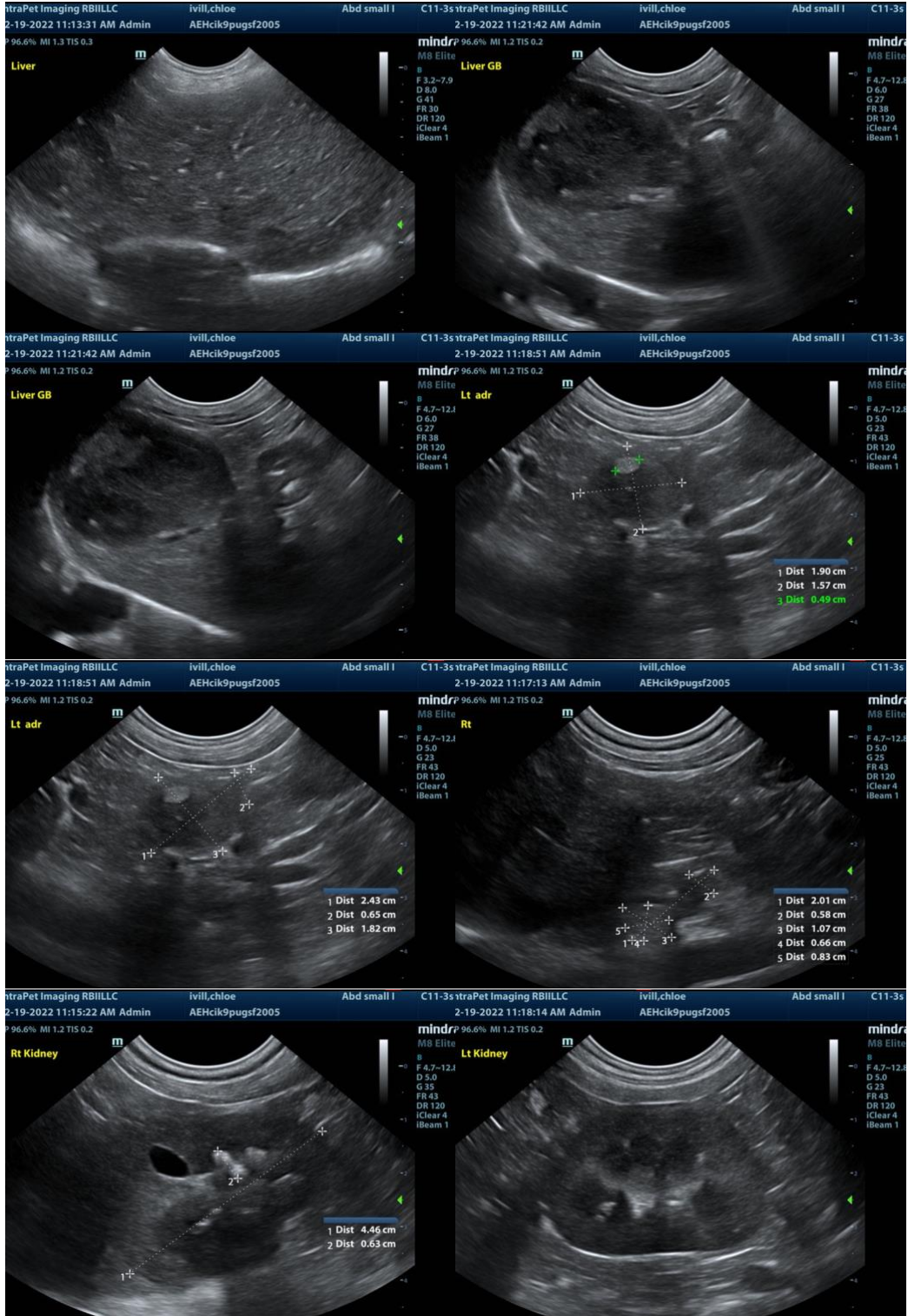
The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Pancreatic duct and capsular contour were acceptably normal and parenchyma respected normal curvilinear patterns. No overt evidence of active inflammatory or neoplastic disease was noted.

ULTRASONOGRAPHIC FINDINGS

- Bilateral adrenal nodules, more prominent in the left. The left adrenal is more concerning for carcinoma or pheochromocytoma, but adenoma is possible and does appear resectable. The right adrenal gland pathology is likely adenoma.
- Chronic inflammatory hepatopathy
- Emerging pancreatic remodeling
- Emerging gallbladder mucocele

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Gallbladder motility study is warranted. Full adrenal work up is warranted. Blood pressures and urine catecholamine, if hypertension is present, is warranted. Ursodiol therapy is warranted over the next 6-8 weeks. Recheck sonogram prior to stopping ursodiol. The cause of anemia is unclear in this patient.





The information and recommendations provided are based on the images presented by the referring veterinarian. 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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