



PATIENT

Pepper Holland

SPECIES

Canine

BREED

Mini Schnauzer

SEX

Spayed Female

AGE

14

WEIGHT

12.6

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Saum Hadi

HOSPITAL NAME

Nimbus PH

REFERRING VET

Saum Hadi

INVOICE

22264

DATE

5/1/23

PRESENTING CLINICAL SIGNS

History: P presents for acute hyporexia and diarrhea. P has been mildly lethargic per O. Started about 1 day after O gave P some tater tots for her birthday. Historic weight loss from about 17 to 12.6 pounds in the last 18 months. On exam, P BAR, mild pain response on palpation of cranial/mid abdomen. Liquid feces on rectal.

Abnormal PE/Chem/CBC/UA Results: Chem 10, CBC, SNAP cPL: Mild ALKP increase (281 U/L), mild SDMA increase (15 ug/dL), mild neutrophilia, mild monocytosis, mild lymphopenia. HCT low normal (37.7%). Chest rads: Minimal cardiomegaly with normal pulmonary vasculature/parenchyma. No evidence of metastatic neoplasia.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The **urinary bladder** and visible pelvic urethra were unremarkable for the level of repletion presented. The urine, however, did present some mildly echogenic debris consistent with mucous, exfoliated cells from renal or bladder origin, and/or blood clots as these echogenic changes can all present similarly. This is often related to urinary tract infection but may represent simple evidence of exfoliated debris or sterile inflammation. Cystocentesis, urinalysis, +/- culture would be recommended to rule out and define any UTI. This is a mild change.

The **left kidney** 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 left kidney. Occasional cortical cysts (up to 7.0 mm) were noted in the left kidney. The left kidney measured 4.0 cm.

An overt mixed hypoechoic undifferentiated target type mass (5.2 cm) was noted with peripheral inflammation. The mass appeared to be deriving from the **right kidney**, impinging upon the caudate process. Slight localized free fluid was noted. The residual right kidney measured approximately 4.0 cm.

Adrenal Glands

The **left adrenal gland** was visualized and recognized as having normal shape, size, position and echogenicity for this breed. The phrenic vasculature, glandular echogenicity and detail were unremarkable. Capsule, cortex, and medullary definition were normal for this age patient. The left adrenal gland measured 0.6 cm.

The **right adrenal gland** was not visualized and may be encompassed in the mass or may be the source of the mass, yet the right kidney was definitely involved and potential portions of the right liver.

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



PATIENT

Pepper Holland

congestion or thrombosis. No sonographic evidence of acute or chronic inflammatory, neoplastic, or infarctual changes were noted.

Liver

SPECIES

Canine

The **liver** revealed a uniform vacuolar hepatopathy pattern with mild hyperechoic increased portal markings, consistent with history of inflammatory hepatopathy. The remainder of the liver appeared unremarkable. The gallbladder was mildly overdistended with suspended debris without striations, not to the level of mucocele formation.

BREED

Mini Schnauzer

Gastrointestinal

SEX

Spayed Female

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 intestine demonstrated normal luminal chyme. No obstructive or overt infiltrative disease was noted. No associated abnormal lymphatic activity was noted. Soft stool was noted in the colon.

AGE

14

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.

WEIGHT

12.6

ULTRASONOGRAPHIC FINDINGS

- Mild hepatic remodeling and minor excessive gallbladder debris
- Right renal mass, possibly involving the right adrenal gland
- Age-related left renal changes with minor mineralization and cortical cysts
- Urinary bladder debris
- Soft stool in the colon

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Ultrasound guided FNA of the mass could be considered, as well as CT evaluation for potential surgical planning. Chest radiographs are warranted. Renal carcinoma vs sarcoma are primary concerns.

IMAGING PERFORMED BY

Saum Hadi

HOSPITAL NAME

Nimbus PH

REFERRING VET

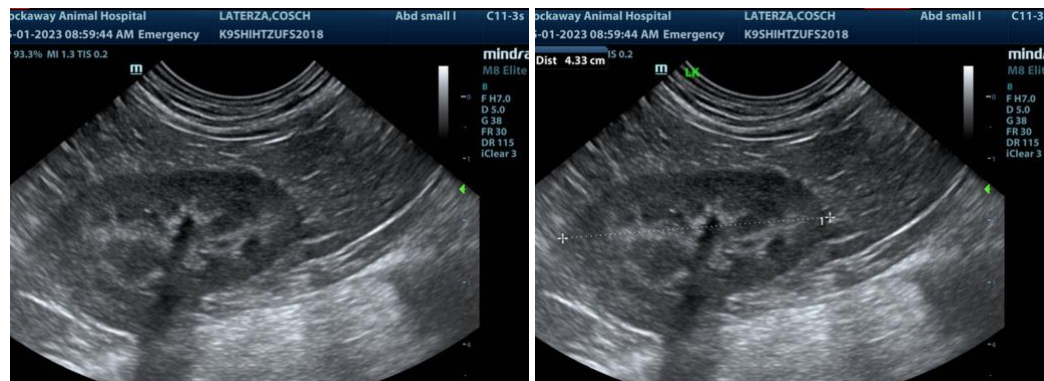
Saum Hadi

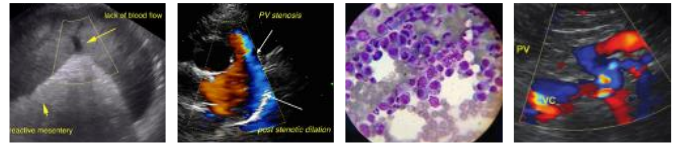
INVOICE

22264

DATE

5/1/23





PATIENT

Pepper Holland

SPECIES

Canine

BREED

Mini Schnauzer

SEX

Spayed Female

AGE

14

WEIGHT

12.6

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Saum Hadi

HOSPITAL NAME

Nimbus PH

REFERRING VET

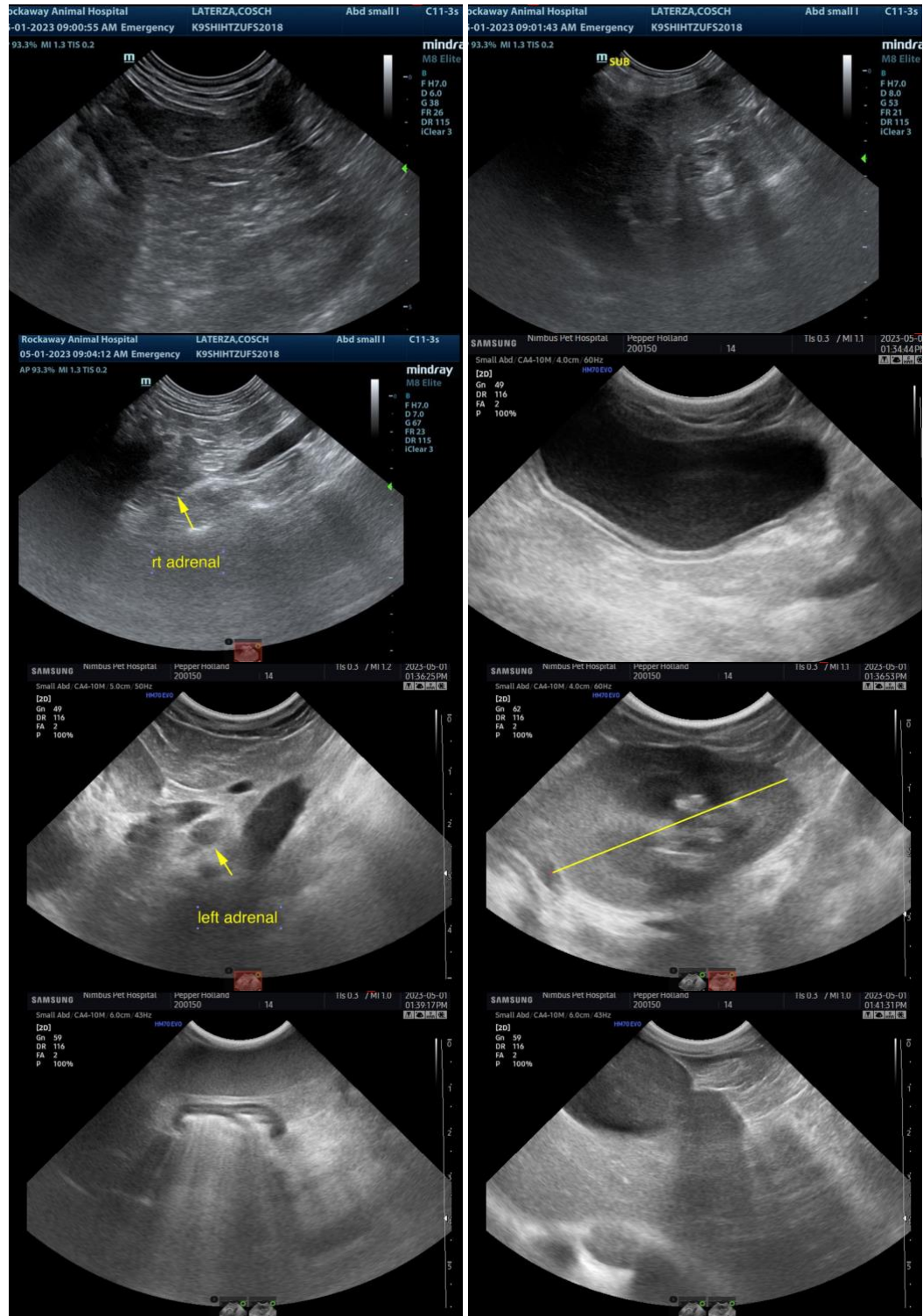
Saum Hadi

INVOICE

22264

DATE

5/1/23





PATIENT

Pepper Holland

SPECIES

Canine

BREED

Mini Schnauzer

SEX

Spayed Female

AGE

14

WEIGHT

12.6

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Saum Hadi

HOSPITAL NAME

Nimbus PH

REFERRING VET

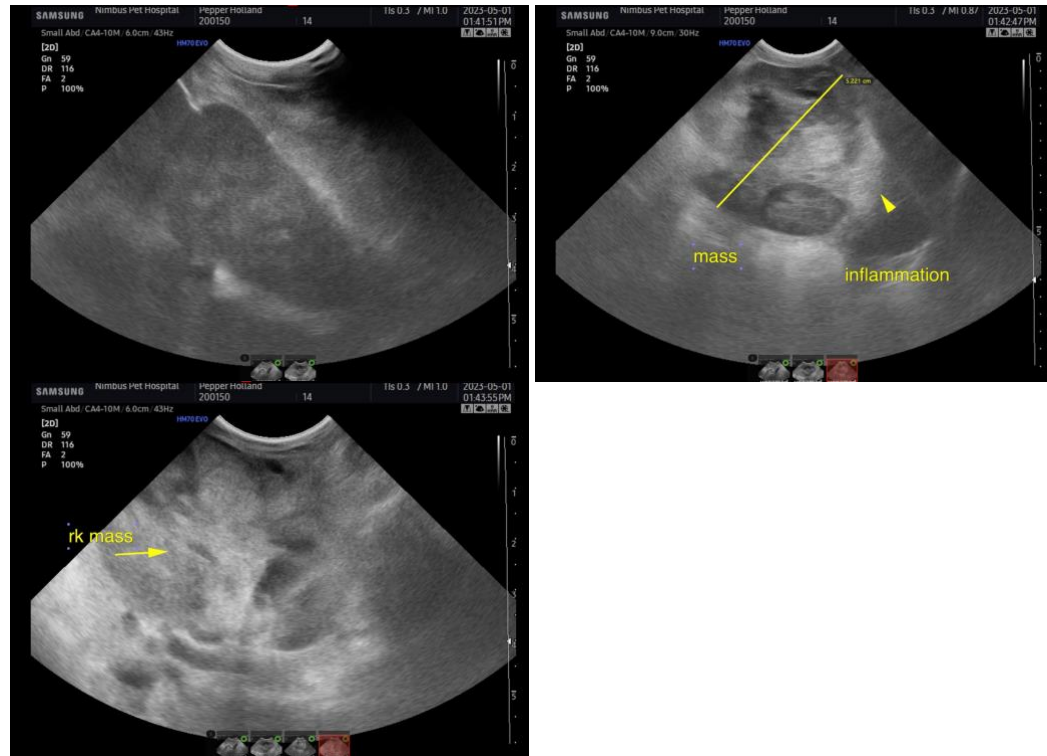
Saum Hadi

INVOICE

22264

DATE

5/1/23



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.

Eric Lindquist, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com
info@SonoPath.com