



## PATIENT

Piper Kniepkamp

## SPECIES

Canine

## BREED

Cattle Dog

## SEX

Spayed Female

## AGE

6 Years

## WEIGHT

17.4 kg

## INTERPRETED BY

R. McKenzie Daniel,  
DVM, DABVP (Canine  
/ Feline Practice)

## IMAGING PERFORMED BY

Lindsay Powell CVT

## HOSPITAL NAME

Hershey Animal  
Emergency Center

## REFERRING VET

Dr. Kimberly Davidson

## INVOICE

14990

## DATE

04/10/26

## PRESENTING CLINICAL SIGNS

Fever of unknown origin. Presented to rDVM 4/10 with temp of 106. On pred long term. Had aspirin yesterday. Lethargy since yesterday

Abnormal PE/Chem/CBC/UA Results: mucoid discharge OU with dermatitis peri ocularly. Mild bleeding from OD upper eyelid dermatitis after rubbed face in kenne Oral Cavity: Mucous membranes pink/tacky, CRT <2s, moderate tartar/gingival erythema Occasional upper airway stertor sounds Occasional papules/pustules on abdomen, no apparent petechiae or ecchymosis. Skin warm to touch HAEC intake EPOC: hyperlactatemia (8.72), BUN 6 (L), metabolic acidosis (pH 7.308, pCO2 26.4, Bicarb 13.2), hypokalemia (2.8) PCV/TP: 45/7.4 Radiographs: no apparent metastasis or pneumonia present in the thorax PT/PTT: PT 17.7 (H), PTT 121.7 (H) rDVM 4/10: CBC: lymphopenia (0.49), monocytopenia (0.11), bands suspected Chem: BUN 6 (L), ALP 836 (H), GGT (19 H) 4dx: negative x 4

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### Urinary System

The urinary bladder was distended in size with mild irregularly thickened apical wall with mild asymmetrical luminal surface contour. A moderate to significant amount of nondependent to mobile particulate urine sediment was present. The trigone, cystourethral junction, and visible pelvic urethra to a depth of 3.0 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic change were noted.

The area of the aortic trifurcation was free of pathology.

Normal size and margination was present in the kidneys. A normal 1:3 cortex / medulla ratio and normal corticomedullary definition were maintained. The echogenicity of the cortex was similar to or slightly less than normal liver parenchyma while the medulla echogenicity was hypoechoic to the cortex with no evidence of pelvic dilation. The left kidney measured 6.4 cm in length. The right kidney measured 6.7 cm in length.

### Adrenal Glands

The adrenal glands were flattened in appearance in conjunction with patient's history and adrenal suppression yet with no obvious pathology. The left adrenal gland measured 0.32 cm width at the caudal pole. The right adrenal gland measured 0.31 cm width at the caudal pole.

### Spleen

The spleen exhibited a finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. Acute to chronic inflammatory, neoplastic, or benign parenchyma changes were not noted.

### Liver & Gallbladder

The liver presented enlarged in size. The parenchyma of the liver was subjectively normal in echogenicity compared to the spleen and renal cortices. The liver parenchyma was uniform with a mildly coarse echotexture. The capsule of the liver was symmetrically rounded to mildly swollen in



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margination. The hepatic and portal vasculature were normal in appearance without signs of congestion.

The gallbladder was non distended in size with minor nonorganized biliary sludge. The cystic duct and common bile ducts were normal without evidence of dilation.

### **Gastrointestinal**

The stomach presented intact wall layering with a normal wall layer ratio. The stomach contained mild nonshadowing ingesta.

The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of ileus, obstruction or foreign material.

Normal visible colon wall layers were present with apparent formed feces in lumen.

### **Pancreas**

The parenchyma of the left limb, body and right limb of the pancreas presented isoechoic to the adjacent omental fat. A normal curvilinear capsule contour of the pancreas was present. The visible pancreatic duct was normal. No signs of active inflammation or neoplastic disease was evident.

### **Free Abdomen**

No overt lymphadenopathy or peritoneal effusion was present.

## **ULTRASONOGRAPHIC FINDINGS**

- Vacuolar/steroid hepatopathy pattern.
- Minor gallbladder debris (non-mucocele).
- Distended bladder with mild cystitis pattern and significant urine sediment.
- Normal bilateral kidneys.
- Normal gastrointestinal tract with mild nonshadowing gastric ingesta/chyme- consistent with food echogenicity.
- Subnormal adrenal glands- consistent with patient's history.

## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Aside from the urinary bladder, no evidence of visceral pathology as a definitive cause of the fever of unknown origin or clinical signs. The liver meets benign criteria and consistent with patient's history in conjunction with bilateral subnormal adrenal glands.

Urine culture and sensitivity on sterile urine sample with empirical UTI/cystitis protocol pending culture and sensitivity results is recommended. No evidence of abdominal neoplastic criteria with emerging to occult bladder neoplasia considered less likely. Screening BRAF assay may be considered.



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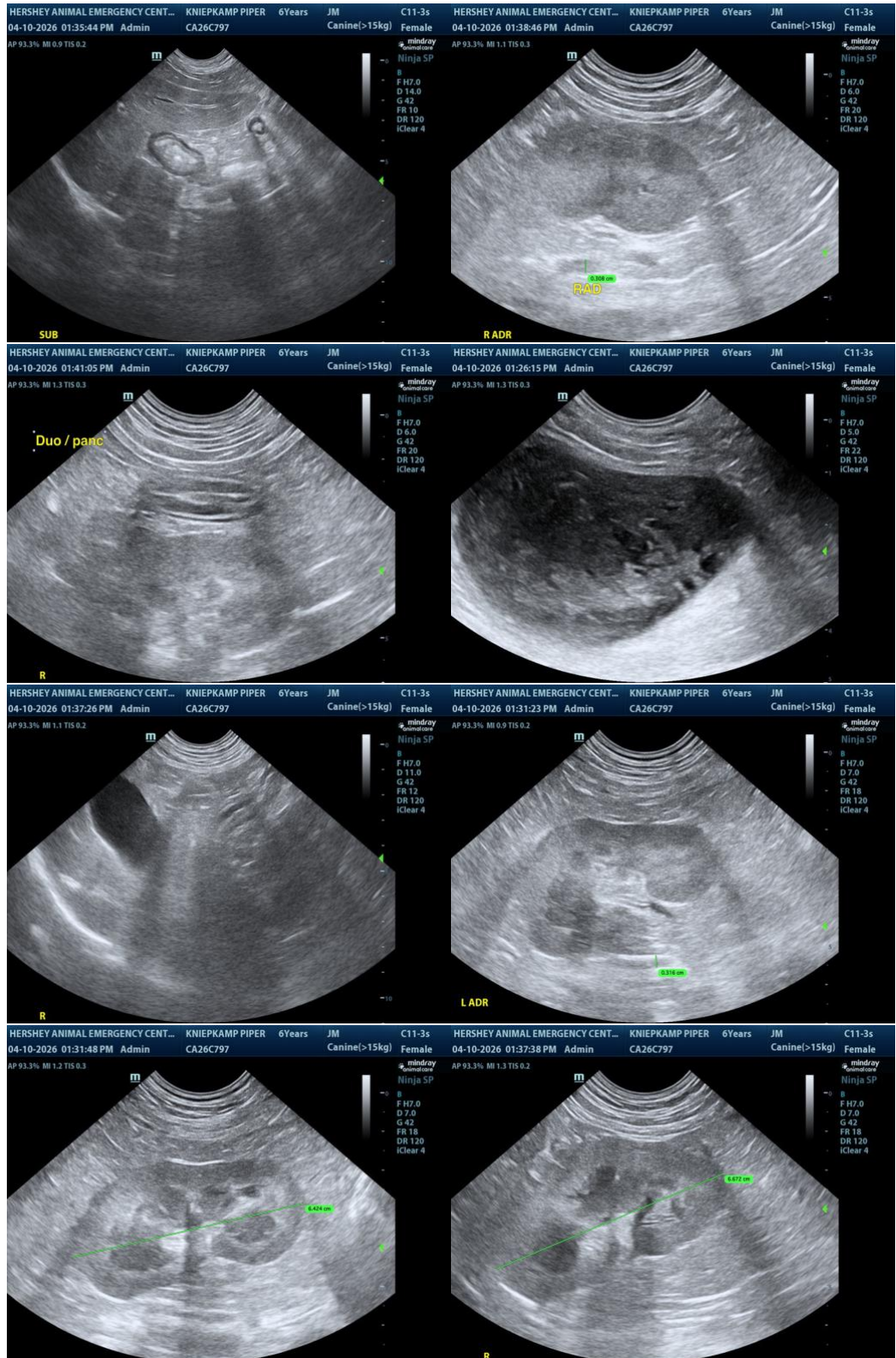
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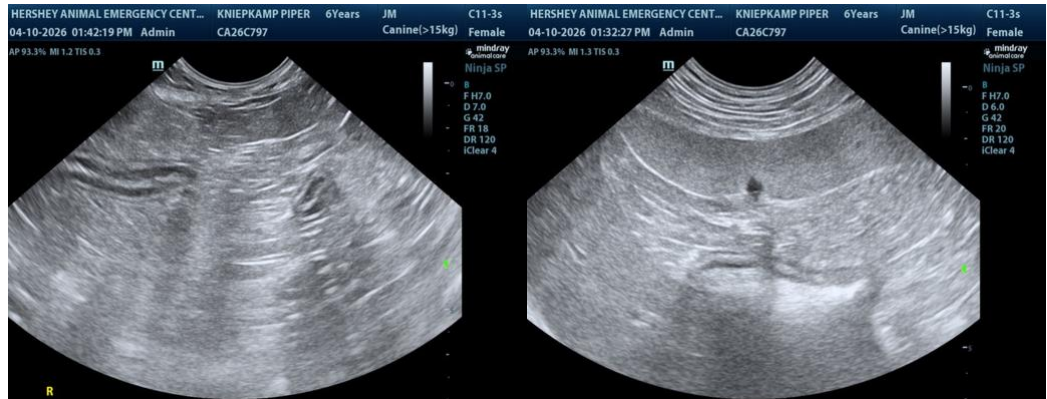
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)

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