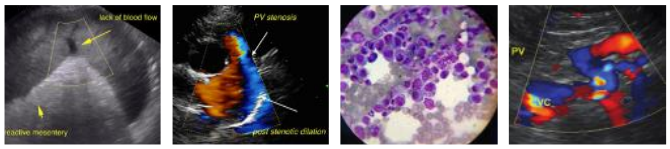
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT

Poppy Gooding

SPECIES

Rodentia

BREED

Rat

SEX

Female

AGE

1 Year 4 Months

WEIGHT

323g

INTERPRETED BY

Karen Ebersole, DVM, DABVP (Canine and Feline)

IMAGING PERFORMED BY

Dallas Reynolds, LVT

HOSPITAL NAME

Lone Mtn. AH

REFERRING VET

Lilliana Munoz, DVM

INVOICE

23544

DATE

7/20/23

PRESENTING CLINICAL SIGNS

History: 1 month hx of hematuria. Abdominal radiographs done at Vetco - NSF. Urine culture came back negative. Unresponsive to enrofloxacin. Performed cysto for UA today- worm seen in urine upon gross examination. UA and BW sent to lab today.

Abnormal PE/Chem/CBC/UA Results: Urine culture - negative.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The **urinary bladder** was normal in size and shape. The bladder wall displayed normal wall layering. At the apical bladder, there was mild polypoid mucosal changes likely secondary to inflammation or previous cystitis. The bladder contents were primarily anechoic with echogenic parallel lined structures visible (small “train tracks”) that may represent adult worms in the bladder. There is other echogenic sediment visible in the still images provided, that could be mucous, red blood cells or smaller worms. The urethra was normal in size and thickness.

The **uterus and ovaries** were visualized on still images and appeared normal for an intact female rat. The right ovary measured 4 mm by 6 mm. The uterus had minimal luminal contents, as would be expected.

Both **kidneys** were subjectively normal in size for species and body weight. The capsule contour was smooth. Normal corticomedullary distinction was present with a normal 1:3 cortex to medulla ratio. The cortex was normal in echogenicity. There were no visible adult worms in the kidneys on the still images provided. The left kidney measured 1.9 cm in length. The right kidney measured 1.6 cm in length.

Adrenal Glands

The right **adrenal gland** appeared normal in shape and size. The right adrenal measured 3 mm in width.

Spleen

The **spleen** was normal size and shape with a smooth capsule contour. The spleen was in a normal position. The parenchyma had a finely textured and homogenous echogenicity.

Liver

The **liver** was normal in size with a mildly irregular capsule contour with mildly rounded liver lobe borders. The parenchyma had moderately coarse heterogeneous texture. There were no overt nodules or granulomas from parasite migration, however they could be smaller than can be detected and contributing to the heterogeneous hepatic parenchyma.

Gastrointestinal

The **stomach** was largely empty with normal size, shape, and position. The stomach wall was normal in thickness and maintained appropriate layering. The **small intestine** displayed normal curvilinear patterns throughout, with normal wall thickness and layering. Normal peristalsis was present. The visible **colon** wall was normal in thickness and layering. There were no visible masses or focal lesions.

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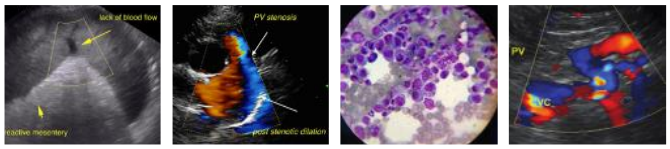

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Pancreas

The visible **pancreas** was normal in size and shape.

Free Abdomen

No peritoneal effusion was noted on examination of the peritoneal cavity.

ULTRASONOGRAPHIC FINDINGS

- Mild polypoid mucosal apical bladder wall
- Suspected adult *Trichosomoides crassicauda* female worm
- Mildly irregular hepatic parenchyma – aging changes vs microgranulomas/fibrosis

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The most likely diagnosis based on history, clinical signs and sonogram is infection with *Trichosomoides crassicauda*. *T. crassicauda* is a nematode that only occurs in the rat. Adult female worms are located in the bladder and are reported to be 10 mm in length. Males exist in the vagina or uterus. Eggs passed in urine are ingested, then hatch in the stomach. The larvae penetrate the stomach wall and migrate to lungs and other organs. Larvae that reach the kidney and bladder develop into adults. Transmission often occurs to pups prior to weaning.

Treatment with Fenbendazole or Ivermectin is reported to be effective for *T. Crassicauda*. Prognosis is good with treatment. Treatment is recommended for the entire colony.

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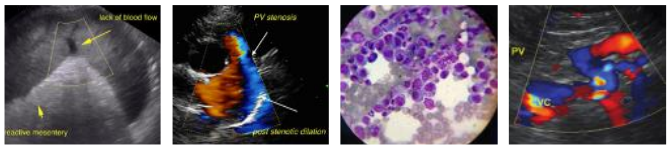

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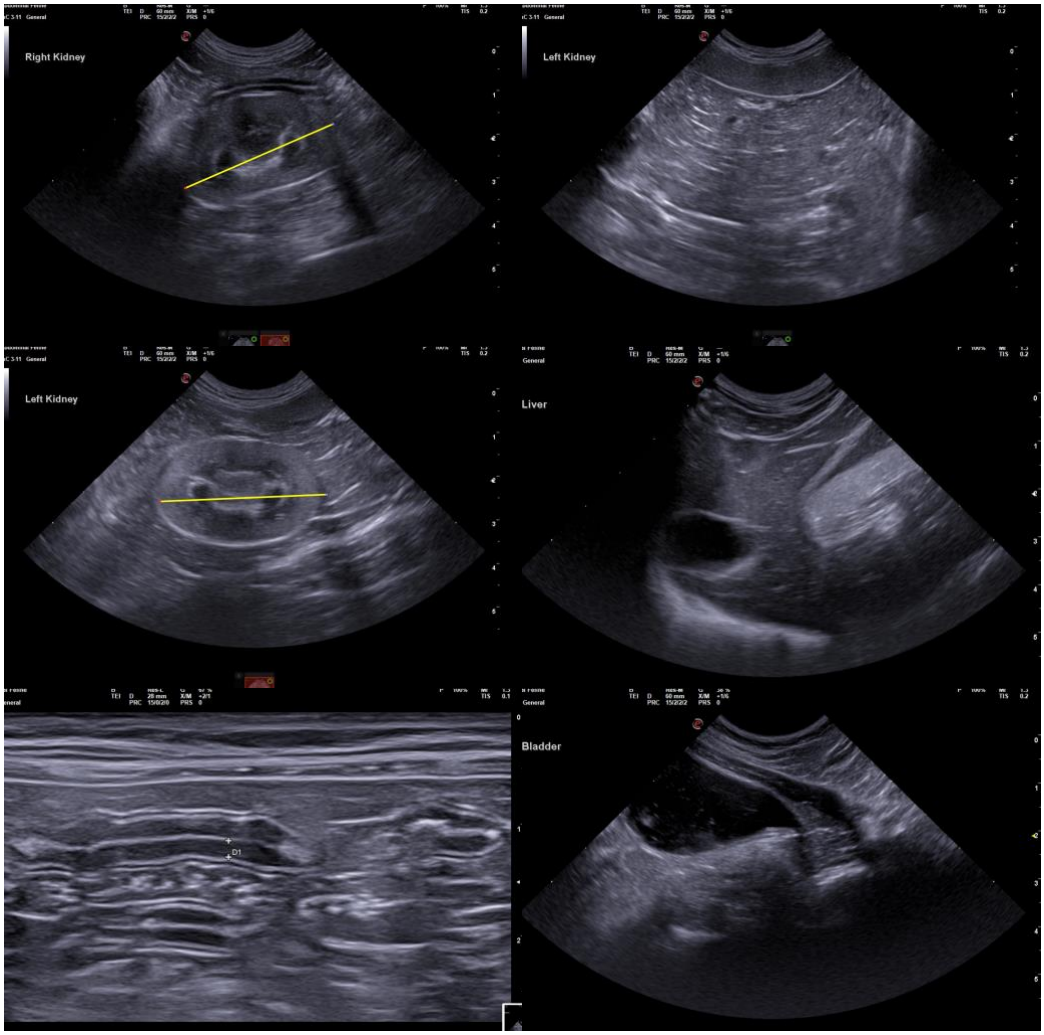

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Karen Ebersole, DVM, DABVP (Canine and Feline practice)
info@SonoPath.com