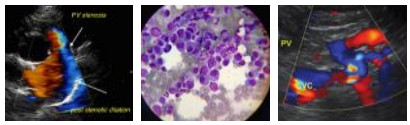
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
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DATE

2-16-22

PATIENT

Denim Millar

SPECIES

Canine

BREED

Yorkie Mix

SEX

Male Intact

AGE

6/18/2021

INTERPRETED BY

Sebastian Jawinski, German Board Certified Vet Specialist in Diagnostic Imaging

HOSPITAL NAME

Paradise Animal Hospital

REFERRING VET

Dr. Kats

INVOICE

50323

PRESENTING CLINICAL SIGNS

Had dental surgery at ADC for numerous retained deciduous teeth at end of Jan. on pre anesthetic labs from ADC was seen to have elevated liver enzymes and mildly low albumin. Post op, has seemed painful, inappetant, and episodic dark to tarry melanotic stools reported. O also reported smelly urine -- UA showed hematuria and bacteruria. Started on oral Antibiotics but didn't tolerate, gave convenia injection. Improved after IV fluids, cerenia and sucralfate admin on 2/5/22. O discontinue sucralfate as seemed to be doing better and eating better. Starting on 2/13/22--painful--will jump up, pace, cry out, and assume "prayer pose" and have abdominal component to breathing. Seen at ER on 2/14 early am-- found NSF on exam and prescribed gabapentin. No improvement, so recheck here today. Current Medications: restarting Gabapentin 50 mg po q 8 to 12 hours and buprenex 0.15 mg sublingual q 8 to 12 hours 2/15 mid day. Cerenia 4.5 mg iv on 2/15 mid day. sucralfate 1/2 g in slurry q 8 hrs starting 2/15 mid day. Date of Previous IntraPet Ultrasound: No previous. Sedation: Midazolam 5mg/ml-0.2 ml (1 mg) IV caused dysphoria. Added Torbutrol IV. Did have oral buprenex and gabapentin on board as well from O. Further imaging will require adequate sedation. Stat Report: Not requested. Imaging Performed By: Rachel Brilhart, RDMS.
Abnormal PE/Chem/CBC/UA Results: Lab Results: persistent mod hypoalbuminemia (1.9), low BUN (3), elevated ALT (133) and ALT (252).--concern for poss hepatic shunt. Prev hematuria resolved as of 2/15/22 Radiographs: on 2/15 show no obvious obstructive pattern, ingesta in stomach, kidneys look "plump" but no visible mineralization or stones seen.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary system

The urinary bladder and trigone present normal findings without evidence of uroliths or sediment. Wall layering is intact on all views without focal or diffuse thickening. Ureters are not visualized and considered to be normal. No evidence of an inflammatory or neoplastic process is noted.

Both kidneys are inconspicuous with a clear corticomedullary definition. Left kidney measures 4.91 cm length, right kidney 5.00 cm. Renal pelvises and exits to the ureters are unremarkable.

Reproductive tract

Both testicles appear normal.

Adrenal glands

Both present normal size, shape and echogenic texture, phrenic vasculature.

Spleen

The spleen is inconspicuous in terms of size, surface and echotexture and shows diameters of 1.03 cm. There are no signs of nodular/focal changes noted.

Liver/Gallbladder

The liver shows a subjectively reduced size. Liver images reveal large ans chaotic/looping vessels (suspected portal vasculature) with diameters of approximately 0.50 cm. The extrahepatic portal vein appears distended at the level of the porta hepatis with diameters of 0.70 cm (Ao same level 0.69 cm). Liver echogenic texture appears diffusely and mildly coarse.

Gastrointestinal

The gastric periphery shows mildly hyperechoic omental fat with at least one further distended vessel. The stomach is mildly filled and considered to be normal. The small intestine and colon present intact wall layers being normal in width and echogenicity. Adjacent mesentery and fat tissue are of normal appearance.

The mesenteric, epigastric and portal lymph nodes are considered to be normal.

Pancreas

All pancreatic parts displayed show isoechoic echogenicity to the surrounding omental fat. Signs of inflammatory changes or focal lesions are missing.

Free Abdomen

There is no evidence of peritoneal or retroperitoneal effusion noted. The para-aortal and medial iliac lymph nodes are considered to be normal. The abdominal fat and great vessels show no pathological findings.

ULTRASONOGRAPHIC FINDINGS

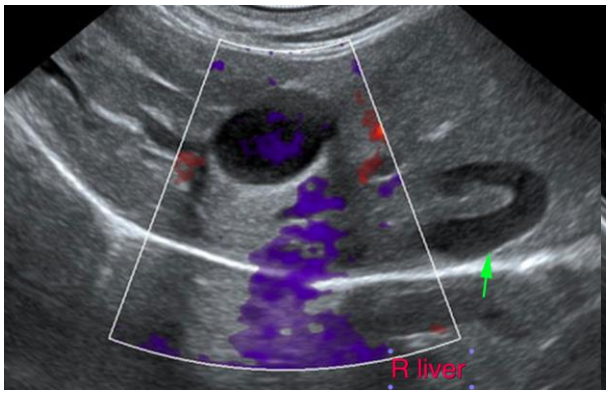
- Distended extrahepatic portal vein
- Looping and distended intrahepatic portal vessels (DD: biliary obstruction)
- Mildly hyperechoic gastric periphery and distended gastric vessel (DD: distended CBD)

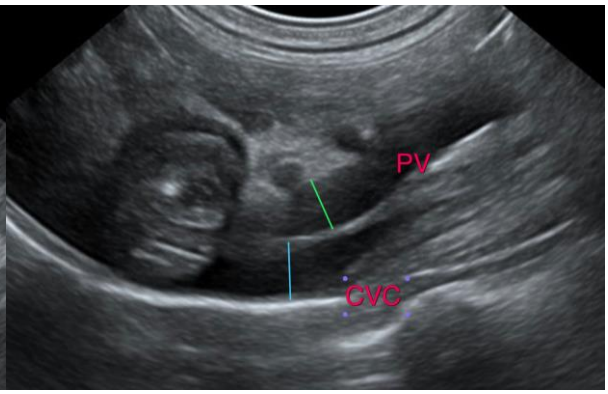
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

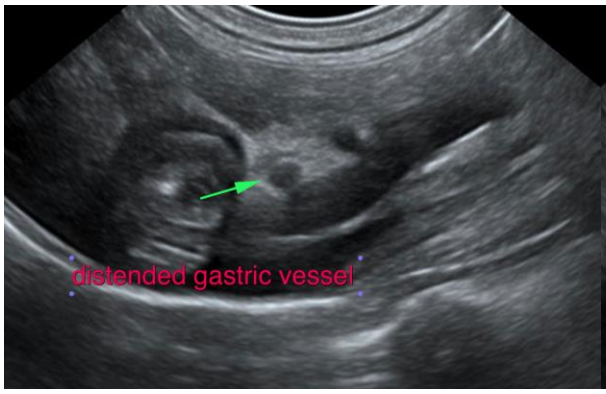
Ultrasonographic findings do speak for an abnormal portal system. There is no compelling evidence of an extrahepatic portosystemic shunt which would be common in small breed dogs. Currently secondary signs for a PSS are missing (urinary, renal calculi, renomegaly/splenomegaly, free peritoneal fluid). The tortuous and dilated vessels (suspected in the right liver) are suspicious for arterioportal fistulas or uncommon intrahepatic shunting. Acquired/secondary PSS cannot be fully excluded. Relevant portal hypertension should go along with peritoneal effusion. Biliary obstruction with significant distension of the intrahepatic ducts and the common bile duct is another potential differential diagnosis. The latter may be a concomitant finding to obstructive lesion in the course of the CBD/the pancreas and pyloric region.

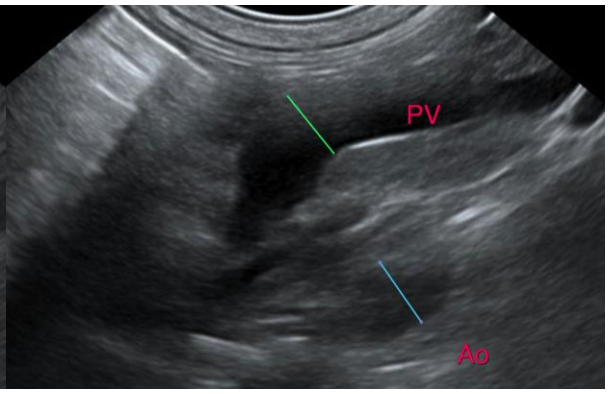
The hyperechoic omental fat in the gastric periphery may indicate mild gastritis/pancreatitis or be secondary to recurrent peritoneal effusion.

I would recommend an abdominal ultrasound performed in sedation with flow velocity measurements of the PV/CVC and abnormal vessels, and/or contrast CT to locate and differentiate biliary obstruction and PSS from congenital AP fistulas.









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.

Sebastian Jawinski, German Board Certified Vet Specialist in Diagnostic Imaging
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