



PATIENT PRESENTING CLINICAL SIGNS

Jax Bak
History: QAR (does appear BAR sometimes, but all of a sudden dull), mm pink, crt <2s Euhdrated O mentioned just got p yesterday - and seems off, Walking but very wobbly and splayed leg Also saw p head shaking (o had video - loks like head tremor). NO seizure activity noted O metioned seems differnet from other puppies - hiding, and sleeping lots. Dld come yesterday and was on a plane so could be tired Previous vet mentioned no health concerns concern for possible PSS currently on: Lactulose 0.2ml PO TID-QID

SPECIES

Canine

BREED

Shih Tzu

Abnormal PE/Chem/CBC/UA Results: ALKP: 372 U/L ALT: 297 U/L GGT: 11 U/L RETIC-HGB: 18.5 pg LYM: 9.31 x10⁹/L MONO: 1.59 x10⁹/L HCT: 31.5% HGB: 10.7 g/dL RETIC: 155.4 K/uL MVC: 55.8 fL MCH: 18.9 pg MPV: 14.4 fL Bile Acids Preprandial/Random: 106.0 umol/L Bile Acids Postprandial: 57.0 umol/L

SEX

Intact Male

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

AGE

2 Months

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.

WEIGHT

1.99 kg

The **kidneys** were normal in size and contour with some nebulous corticomedullary definition with medullary rim sign, essentially normal variant for the breed. The left kidney measured 4.27 cm. The right kidney measured 4.58 cm.

INTERPRETED BY

Eric Lindquist, DMV DABVP, Cert. IVUSS

Adrenal Glands

Both **adrenal glands** were 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 right adrenal gland measured 1.43 cm x 0.44 cm at the caudal pole and 0.82 cm at the cranial pole. The left adrenal gland measured 1.45 cm x 0.43 cm at the caudal pole and 0.38 cm at the cranial pole.

IMAGING PERFORMED BY

Kelly Reschny

Spleen

HOSPITAL NAME

Beattie Pet H Burlington

The **spleen** itself was unremarkable. A dorsally directed small vessel was present in the region of the splenocaval shunt, however, could not be confirmed as a gas artifact in the stomach was obscuring some of the normal views for shunt hunting, however, an irregular vessel was noted in the region of splenocaval shunts.

REFERRING VET

Dr. Murota

Liver

The **liver** was mildly subnormal in size with uniform parenchyma. The vena cava measured 6.0 mm. The portal vein measured 4.0 mm at the branching. No evidence of intrahepatic shunting. Mild increased portal markings noted, suggestive for an inflammatory event.

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Gastrointestinal

DATE

9/28/21

The **stomach** was dilated with fluid. Mucosal hypertrophy was present. No evidence of foreign body. The small intestine and colon were unremarkable.

Pancreas



PATIENT

Jax Bak

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.

SPECIES

Canine

Free Abdomen

Trace physiologic free fluid noted.

BREED

Shih Tzu

ULTRASONOGRAPHIC FINDINGS

- Microhepatica
- Gastritis pattern
- Possible splenocaval shunt
- Kidneys, some nebulous corticomedullary definition with medullary rim sign, essentially normal variant for the breed

SEX

Intact Male

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

AGE

2 Months

I recommend medical management followed by CT with contrast in this patient. Clinical support with the following or similar recommended. Elevated bile acids quick therapy followed by CT to confirm suspicion of splenocaval shunt.

WEIGHT

1.99 kg

Hepatic Support for Bile Acid Elevation +/- Hepatic Encephalopathy

Royal Canin Hepatic Support diet or Hills L/D, Metronidazole (7.5 mg/kg PO bid) over the next 14 days, **Lactulose** (Oral: 3.1-3.7 g/5 ml lactulose in a syrup base) long term to target 2-3 soft stools/day, with a **high-quality protein supplement** of minor amount of **yogurt** or **cheddar cheese**. Monitor bile acids, with attention paid to dropping albumin, BUN or cholesterol. SAME and nutraceuticals as needed. **Ursodiol** (10-15 mg/kg p.o. q24h) can be considered as hepatoprotectant and to enhance bile flow. **Zinc** serum level keep between 200—500 ug/dl. If deficient then Tx zinc acetate 1-3 mg/kg/day. Gastrointestinal protectants are recommended if the patient is anorexic.

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DABVP, Cert. IVUSS

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Burlington

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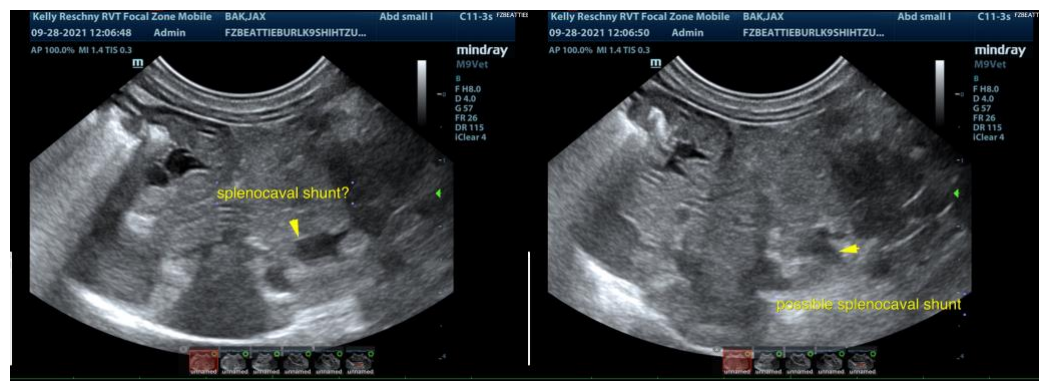
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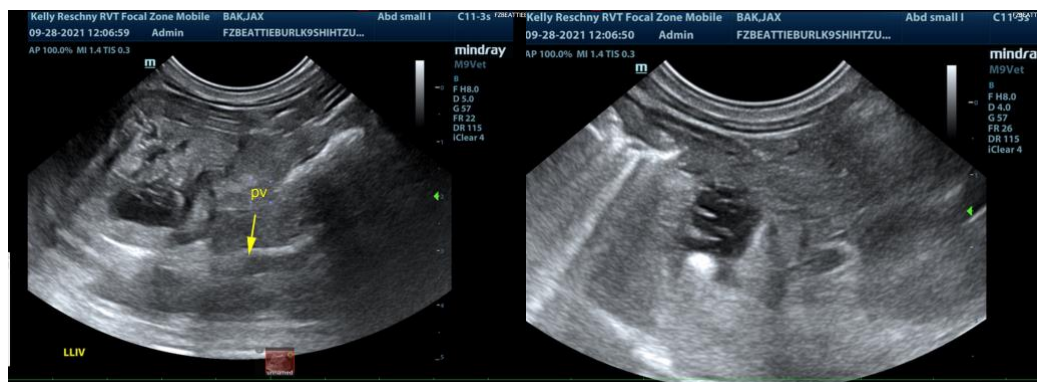
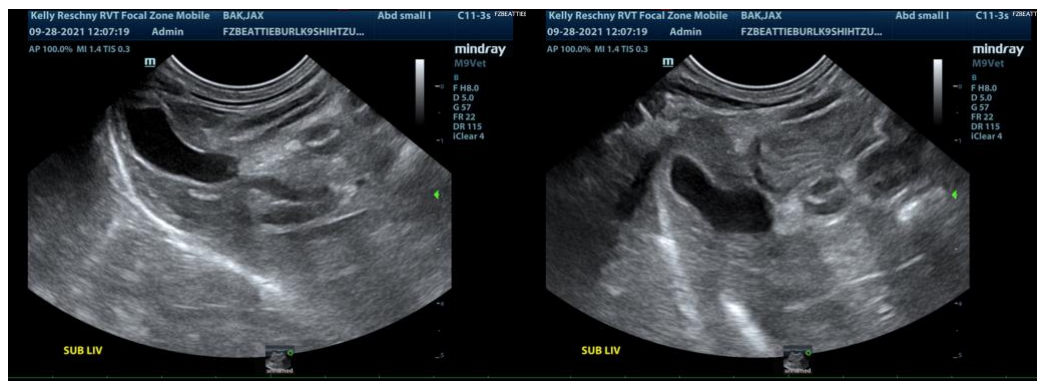
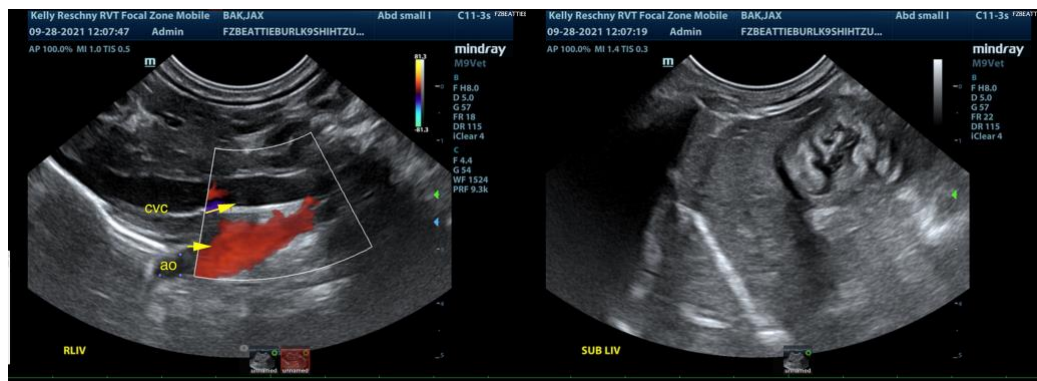
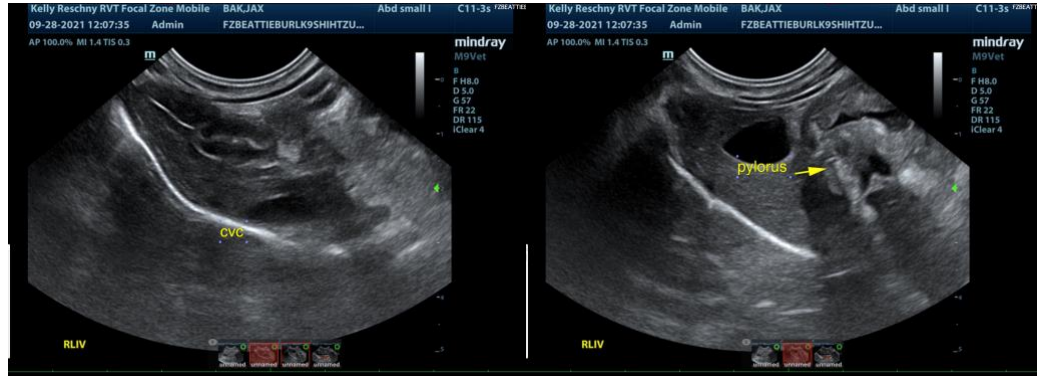
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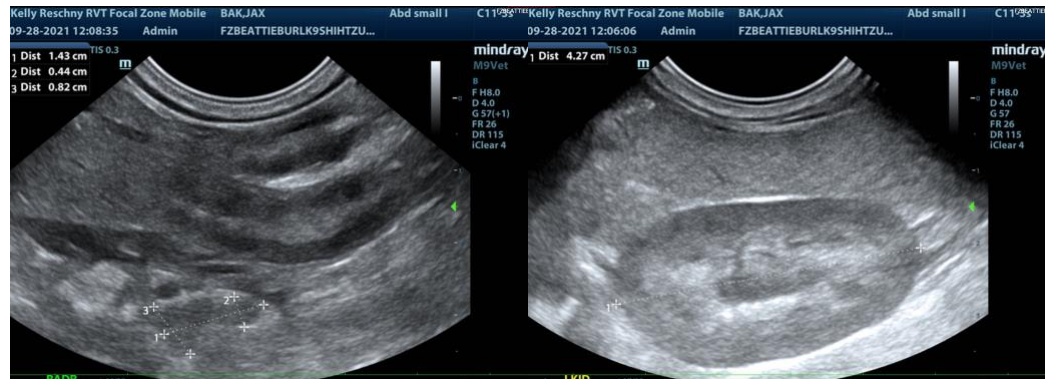
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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Eric.Lindquist@SonoPath.com