

PATIENT PRESENTING CLINICAL SIGNS

Mischief Oakes History: Anorexia x weeks, will occasionally eat treats/cheese. Possible splenic mass seen on radiographs as well as possible secondary mass mid-abdomen.

SPECIES Abnormal PE/Chem/CBC/UA Results: Glob. 3.7, A/G ratio 0.7, Alk. Phos. 241, neuts. 10854.

Canine **ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

BREED *Urinary System*

Labrador Retr Mix The urinary bladder is moderately distended with anechoic urine, and no luminal sediment is present. The ureteral papillae, trigone and pelvic urethra are of normal appearance, and the ureters are not visible (normal). No masses, calculi or mucosal irregularities are noted. Urethra visualized to 3.0 cm.

SEX The kidneys are of normal size and shape and exhibit appropriate corticomedullary differentiation with a normal 1:3 cortex to medulla ratio. There is no evidence of nephrolithiasis, mineralization, pyelectasia, cystic change or hydronephrosis. The proximal ureter is not visible (normal). The left kidney is 6.4 cm in length. The right kidney is 5.8 cm in length.

AGE *Adrenal Glands*
12 years The adrenal glands are both identified in their normal locations. There is a mineralized mass arising from the left adrenal gland, measuring 7.5 x 2.0 cm. Vascular invasion is evident. They are otherwise normal in size and shape with appropriate parenchymal echogenicity and normal phrenic vasculature. The right adrenal gland height is 5.5 mm at the cranial pole and 6.2 mm at the caudal pole.

WEIGHT *Spleen*
50 lbs There are two inhomogenous splenic masses, one arising from the splenic head, and the other from the body, both of which disrupt the splenic capsule. The surrounding omentum is normal. One mass measures 3.5 x 3.0 cm, the other measures 4.5 x 5.2 cm. The splenic vasculature is normal with no evidence of congestion or thrombosis, and blood flow through the splenic hilus appears normal.

INTERPRETED BY

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DABVP (canine/feline
practice)

IMAGING PERFORMED BY

Kelly Vazquez

HOSPITAL NAME

Brenda King VS

REFERRING VET

Dr. Brenda King

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Gastrointestinal

The stomach is mildly distended with anechoic fluid. The gastric wall is 4.6 mm with normal deviations due to rugal folds and exhibits appropriate wall layering. The pylorus is of normal appearance.

The visualized portions of the duodenum, jejunum, and ileum are of normal thickness with intact wall layering that exhibits the appropriate 1:3 muscularis to mucosa ratio. The duodenal wall measures 4.1 mm. The jejunal wall measures up to 3.8 mm. Intestinal motility appears normal.

The visible portions of the colon are of normal thickness, up to 1.1 mm, with intact wall layering. The ileocecal junction is visualized and appears normal.

Pancreas

The areas of the limbs and body of the pancreas are isoechoic to the surrounding mesenteric fat, with normal capsular appearance. There is no evidence of peripancreatic inflammation. The pancreatic duct appears normal.



PATIENT

Mischief Oakes

Free Abdomen

There is no evidence of free fluid within the peritoneal cavity. The omentum and intra-abdominal fat diffusely hyperechoic. Enlarged abdominal lymph nodes are not observed. The aortic trifurcation has normal blood flow with no evidence of thrombosis.

SPECIES

Canine

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Mineralized left adrenal mass with cable invasion
- Two splenic masses with capsular expansion

BREED

Labrador Retr Mix

Secondary Findings

- Mild inflammatory changes consistent with peritonitis
- Reactive hepatopathy

SEX

Female Spayed

AGE

12 years

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The changes to the left adrenal gland could be consistent with an adenocarcinoma or pheochromocytoma. Given the mineralization and invasion of the vena cava, an aggressive malignancy is likely. Recommendations include:

WEIGHT

50 lbs

- Three-view chest radiographs to screen for metastasis
- Blood pressure measurement to screen for pheochromocytoma
- If signs of Cushing's Disease are present, then adrenal function testing (either a low-dose dex-suppression test or ACTH stimulation test) is recommended.
- Measurement of urine catecholamine metabolites can help to identify a pheochromocytoma. Availability of this testing has been variable but may currently be available from Marshfield Laboratories or IDEXX laboratories.
- Fine needle aspiration with a 25g needle could be considered if a coagulation profile is normal.
- Further assessment via CT scan would also be warranted, especially if adrenalectomy is a consideration.

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The splenic mass could represent either a benign hemangioma, hematoma or malignancy. Recommendations include:

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- Three view chest radiographs to rule out metastasis
- Splenectomy with histopathology
- If surgery is not elected, initiation of therapy with Yunnan Bai Yao and I'm-Yunity may serve to decrease risk of acute hemorrhage. More information, including dosing for these therapies can be found here:
 - <https://penntoday.upenn.edu/news/compound-derived-mushroom-lengthens-survival-time-dogs-cancer-penn-vet-study-finds>
 - https://www.mspca.org/angell_services/yunnan-baiyao-to-use-or-not-to-use/

REFERRING VET

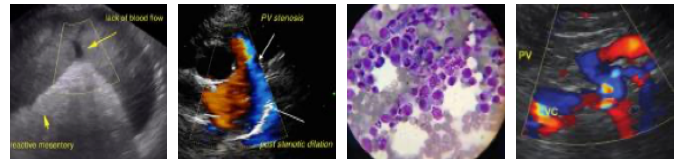
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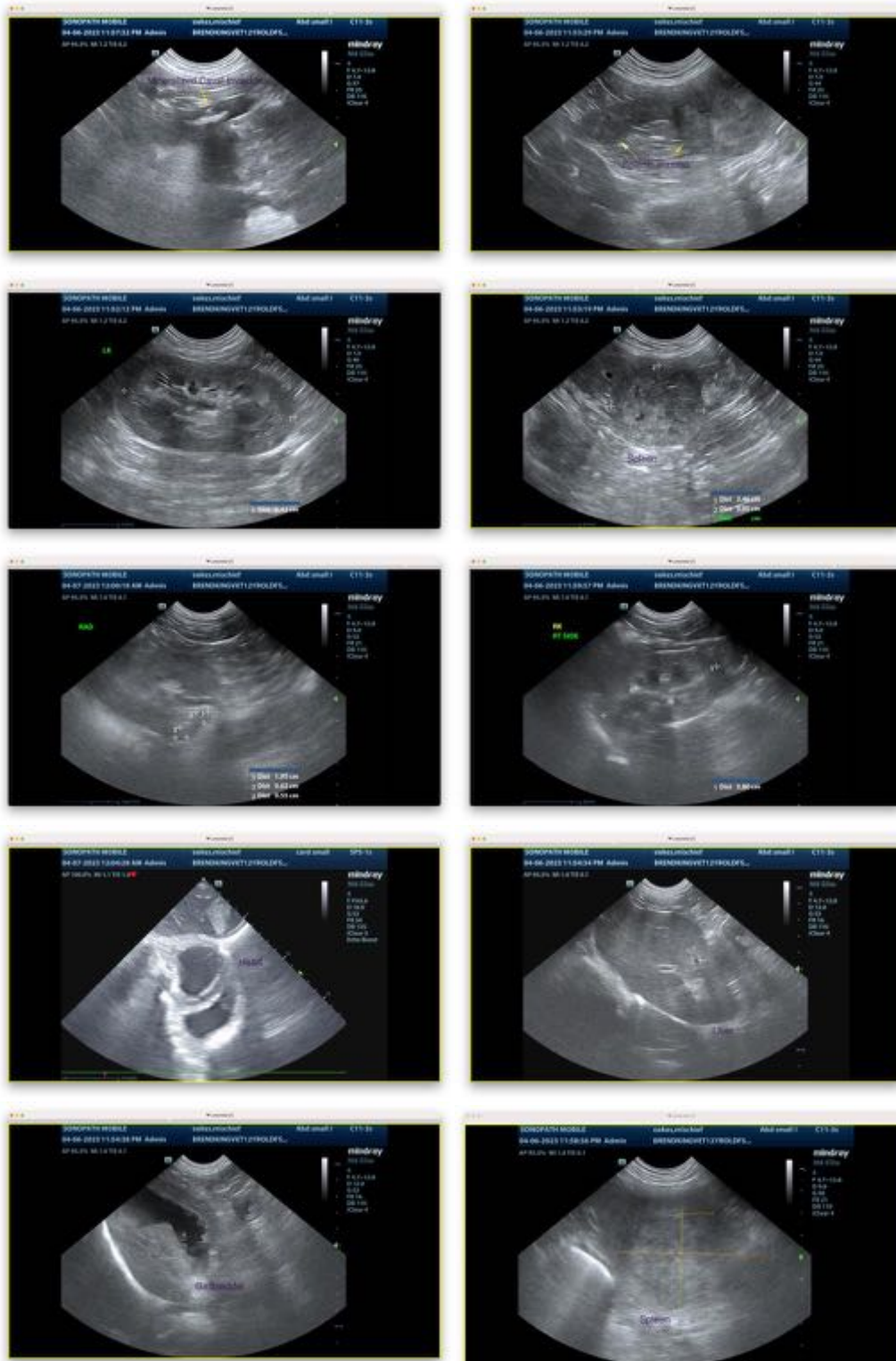
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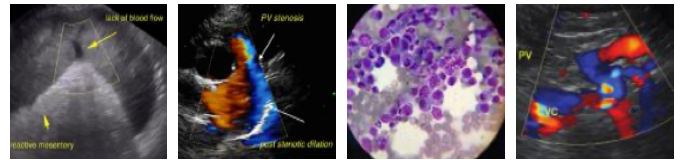
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.



PATIENT

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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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