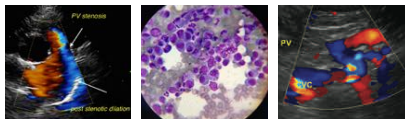
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
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DATE
6/27/22

PATIENT
Bailey Koslow

SPECIES
Canine

BREED
Mix

SEX
Spayed Female

AGE
6/29/13

WEIGHT
15.4 lbs

INTERPRETED BY
Lisa Carioto, DVM, DVSc, Diplomate ACVIM

HOSPITAL NAME
Banfield Glen Burnie

REFERRING VET
Dr. Dechtiaruk

INVOICE
31266

PRESENTING CLINICAL SIGNS

Elevated liver values and bile acids test was abnormal.
Current Medications: Denamarin Advanced small-medium dog SID.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Declined.
Stat Report: Not requested.
Imaging Performed By: Rachel Brilhart, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The **urinary bladder** is adequately distended with anechoic contents. The wall is smooth and regular. No abnormalities are noted with the trigone or proximal urethra, and there is no evidence of sediment, cystoliths, polyps or a mass. No abnormalities are observed with the papillae.

Kidneys

The **left** kidney measures 4.25 cm. The capsule is smooth. A very mild loss of the normal definition of the cortico-medullary junction is present. Accumulation of fat is noted at the diverticulae and within the pelvis. There is no evidence of nephroliths or pyelectasia. Blood flow is within normal limits. The surrounding mesentery is not hyperechoic.

The **right** kidney measures 4.01 cm. Findings are similar to the left kidney.

Aortic bifurcation/trifurcation
No abnormalities observed.

Adrenal Glands

The **left** adrenal gland measures 0.67 cm at the cranial pole, 0.53 cm at the caudal pole and 1.73 cm in length. The cranial pole is mildly enlarged for a dog of Bailey's stature. It has a rounded nodular effect, however, an obvious mass is not evident. No abnormalities are noted with the gland's overall echogenicity or echotexture. The phrenico-abdominal vein and surrounding vasculature and mesentery are unremarkable.

The **right** adrenal gland measures 0.63 cm at the cranial pole, 0.69 cm at the caudal pole and 1.54 cm in length. The gland is mildly enlarged for a dog of Bailey's stature. No abnormalities are noted with the gland's overall echogenicity or echotexture. The phrenico-abdominal vein and surrounding vasculature and mesentery are unremarkable.

Spleen

The spleen is within normal limits in size, architecture, echotexture, and echogenicity. The capsule is smooth. No abnormalities are observed with its vasculature, i.e. congestion and thrombi are not identified.

Liver

Although the liver does not seem to be enlarged lengthwise (past the costal arch), it seems "swollen" and is easily visualized while the left kidney is being evaluated. Therefore, hepatomegaly is suspected, however, hepatomegaly is better characterized at the time of the ultrasound or radiographically. The liver's borders are smooth and vary between sharp to very mildly rounded. A diffuse, very mildly coarse or granular echotexture is observed. No obvious abnormalities are noted with the hepatic vessels.

The gallbladder wall is within normal limits in thickness and echogenicity. A small amount of free floating and inspissated echogenic material is present within the GB. The portions of the cystic and/or common bile ducts observed are not dilated or tortuous, i.e. there are no signs of an obstruction.

Gastrointestinal

A large amount of gas is present within the lumen of the stomach. The gastric wall is within normal limits in thickness and the wall layers are well defined. The submucosa may be mildly prominent in certain views for which the clinical significance is unknown. Peristalsis cannot be evaluated due to panting artifact.

The small intestinal wall thickness, including the duodenum, is within normal limits and the definition of the wall layers is preserved. Abnormally dilated loops of bowel are not observed.

The colonic wall is not thickened and mural detail is considered normal. Semi-formed stools are present within the colon.

There are no obvious signs of a mass, foreign body, infiltrative disease or an obstruction in the gastrointestinal tract.

Pancreas

The **right limb** is mildly enlarged with regular contours. Its overall echogenicity is hyperechoic. It has a moderately coarse echotexture consisting of small hypoechoic nodules and occasional and pinpoint hyperechoic foci scattered throughout the parenchyma. Age-related changes, such as nodular hyperplasia and fibrosis are suspected. Fibrosis may occur secondary to age, previous episodes of pancreatitis, mineralization, as well as amyloid deposition. The surrounding mesenteric fat may be very mildly hyperechoic. Overt signs of pancreatitis are not noted, however, a subclinical, smoldering pancreatitis cannot be excluded. There is no evidence of neoplasia.

No obvious abnormalities are noted with the **left limb**.

Other

Lymph nodes
No abnormalities are observed

Abdominal effusion is not visualized.

ULTRASONOGRAPHIC FINDINGS

- **Liver**: Possible mild hepatomegaly which would have to be confirmed radiographically. A mild reactive hepatopathy may be present based on the mildly coarse or granular echotexture. The latter hepatic parenchymal change is mild and non-specific; it could be secondary to an inflammatory hepatopathy (i.e., bacterial cholangiohepatitis, chronic active hepatitis), copper hepatotoxicosis, leptospirosis (less likely). Additional inquiries regarding exposure to tick or other vector-borne diseases are recommended, in addition to medications and natural supplements, raw-meat diets (bacterial hepatopathies), as well as travel history. There are no signs of target lesions or infiltrative disease, such as neoplasia.

- **Gallbladder:** The gallbladder sludge is most likely clinically insignificant, however, gastroesophageal reflux disease (GERD), may occur in some patients. Obtaining a history regarding signs of GERD

from the client is suggested. Treatment with an anti-acid, proton pump inhibitor or ursodeoxycholic acid may be required.

- **Adrenal glands**: Very mild **bilateral adrenomegaly (**for a dog of Bailey's stature)**.** Bilateral adrenomegaly may be due to adrenal hyperplasia secondary to chronic illness, which is a form of stress. Pituitary dependent hyperadrenocorticism (HAC) is another differential diagnosis. The rounded, nodular effect at the cranial pole of the left gland may be an emerging, benign, adenoma, or may be the normal shape of her gland.

- **Pancreas**: Age-related changes, such as nodular hyperplasia and fibrosis are suspected. Fibrosis may occur secondary to age, previous episodes of pancreatitis, mineralization, as well as amyloid deposition. Very mild hyperechogenicity of the surrounding mesenteric fat cannot be excluded. Although overt signs of pancreatitis are not noted, subclinical, smoldering pancreatitis must be considered. There is no evidence of neoplasia

- **Kidneys**: Very mild changes suggestive of age related degeneration.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The following are suggested/recommended

Urinalysis and urine culture and sensitivity

If the urine culture and sensitivity is negative, a urine protein: creatinine ratio is suggested to exclude proteinuria (hyperadrenocorticism)

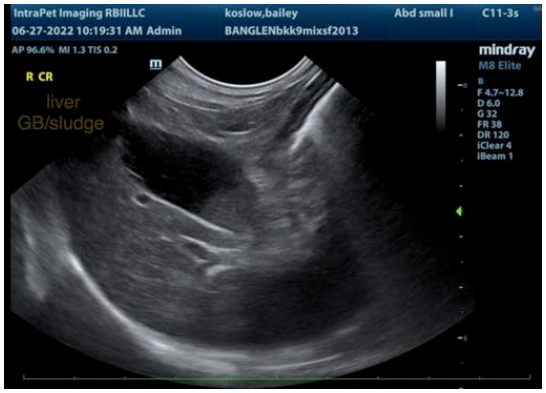
Arterial blood pressure

A spec cPL; pancreatitis can cause increased liver enzyme activities due to ascending inflammation and secondary bacterial infections.

Obtaining a history regarding diet fed and whether signs of GERD are present. Treatment with an anti-acid, proton pump inhibitor or ursodeoxycholic acid may be required.

A decision to pursue further diagnostics for hyperadrenocorticism should be correlated with Bailey's clinical signs *or* whether she has proteinuria and/or hypertension. That is, further diagnostics are not necessarily recommended (provided proteinuria and/or hypertension) as treatment is not necessarily suggested (depending on the internist).

Note, serum bile acids may be abnormal (depending on results) in patients with HAC.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koslow,bailey
Abd small I
C11-3s
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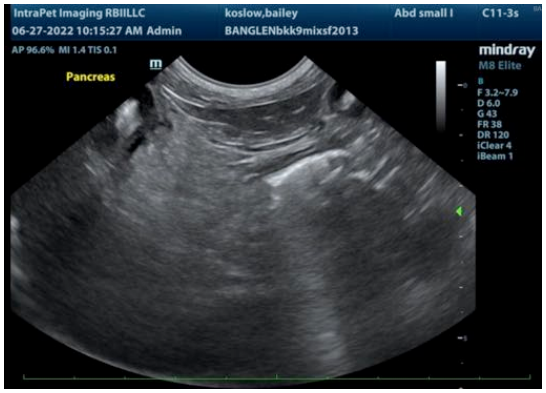
AP 96.6% MI 1.3 TIS 0.2
mindray
M8 Elite
R CR
liver
GB/sludge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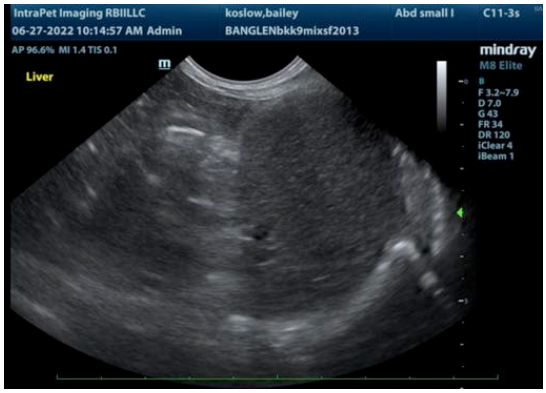
mindray
M8 Elite
Pancreas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mindray
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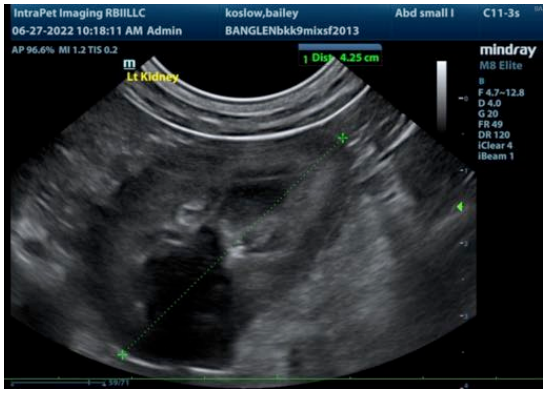
Liver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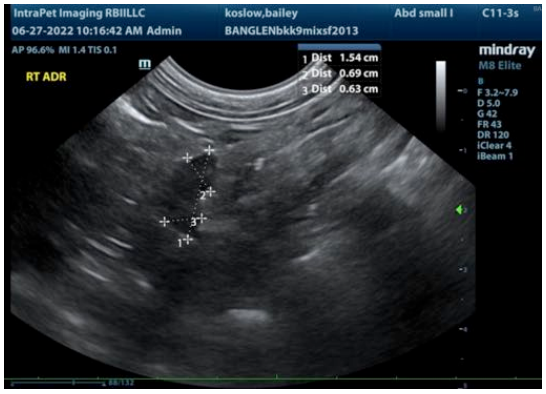
AP 96.6% MI 1.2 TIS 0.2
mindray
M8 Elite
Lt Kidney
1 Dist 4.25 cm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koslow,bailey
Abd small I
C11-3s
06-27-2022 10:16:42 AM Admin
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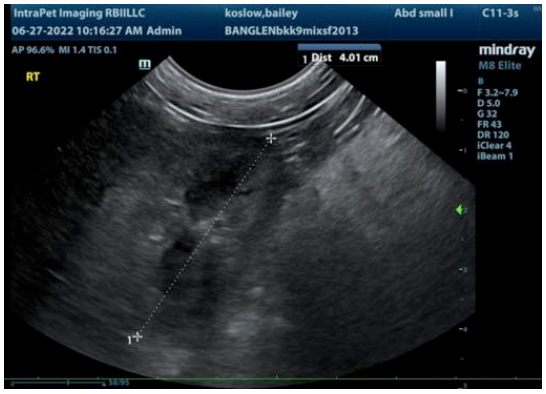
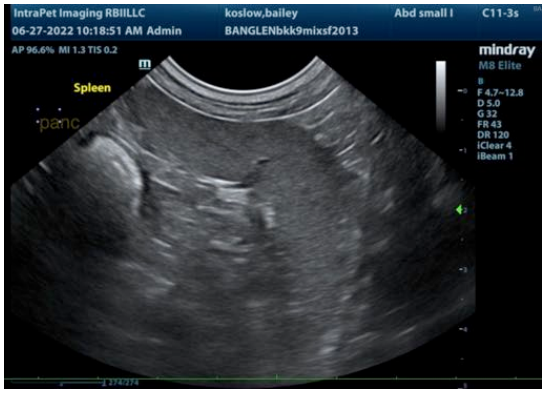
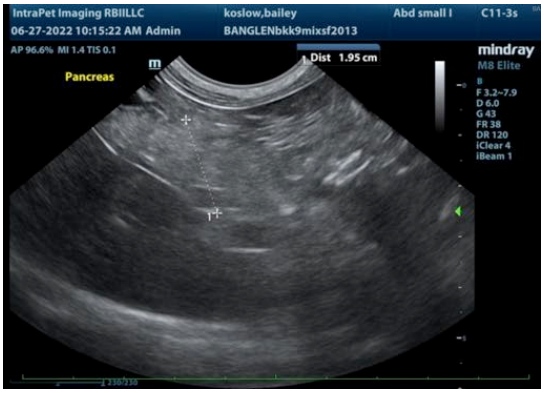
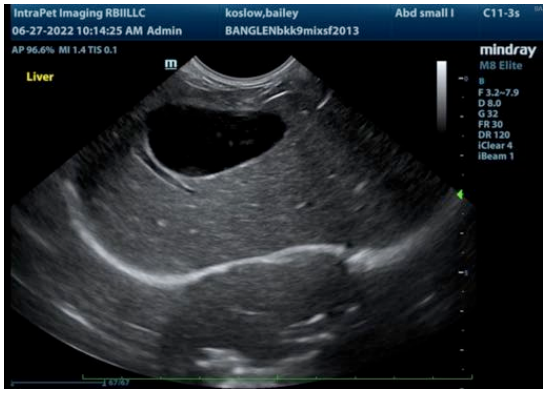
AP 96.6% MI 1.4 TIS 0.1
mindray
M8 Elite
RT ADR
1 Dist 1.54 cm
2 Dist 0.69 cm
3 Dist 0.63 cm


IntraPet Imaging RBIILLC
koslow,bailey
Abd small I
C11-3s
06-27-2022 10:16:27 AM Admin
BANGLENbkk9mixsf2013
AP 96.6% MI 1.4 TIS 0.1
mindray
M8 Elite
RT
1 Dist 4.01 cm







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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