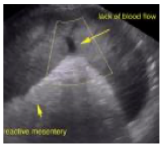
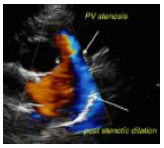
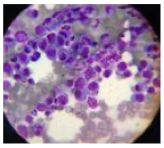
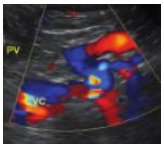
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

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

PATIENT
Lily Oakie

SPECIES
Canine

BREED
Mixed Breed

SEX
Female Spayed

AGE
13 years

WEIGHT
65.6 lbs

INTERPRETED BY
Jessica Midence, DVM, DACVIM (SAIM)

IMAGING PERFORMED BY
Kelly Vazquez

HOSPITAL NAME
Legacy AH

REFERRING VET
Dr. Kristin Potenzone

INVOICE
12942

DATE
5.4.23

PRESENTING CLINICAL SIGNS

History: Patient presents for history of elevated ALP, nausea. Current meds: multiple supplements, on Gabapentin and Thyro-tabs.

Abnormal PE/Chem/CBC/UA Results: Repeat blood work pending, last month ALP in the 300s.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder mucosa, trigone, and visible urethra are normal in thickness and there is no evidence of mucosal irregularities. The bladder lumen is significatnly distended with anechoic urine and bladder thickness is considered normal for volume of urine.

The cortical edge of the left kidney could be seen enough to get a general measurement of 6.00 cm (which is normal in size). Otherwise, the left kidney would not be evaluated based on the images provided.

The right kidney is normal in size (5.95 cm) shape and architecture with smooth peripheral margins. There is normal corticomedullary distinction and normal echogenicity. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

Adrenal Glands

The left adrenal gland could not be visualized.

The right adrenal gland is normal in size (caudal pole 0.68 cm / cranial pole 0.78 cm) with a normal shape and is normal in appearance and echogenicity.

Spleen

The spleen is measures thick (2.30 cm) and is mottled throughout, with parenchyma hyperechoic to liver. The capsule is very slightly undulating with no obvious irregularities. Splenic vasculature appears normal without signs of congestion or thrombosis. At the tail of the spleen there is a pocket of anechoic effusion, that in some views looks organized and possibly surrounding a hypoechoic, rounded nodule (0.46 cm x 0.85 cm). If this is a nodule rather than a collection of effusion, it is smooth, hypoechoic, and bulges the capsule of the spleen, though a collection of effusion is suspected over a nodule.

Liver

The liver is subjectively normal in size. The liver has irregular borders and a nodular appearance, with a coarse and mottled echotexture and decreased portal markings. The fat surrounding the liver is hyperechoic and has an almost nodular appearance as well. There is effusion between the liver lobes, as well as between the liver and the diaphragm, and a pocket of echogenic effusion between the left liver lobes. The visible portions of the vasculature and biliary tract appear normal.

The gallbladder cannot be fully evaluated, especially the deeper portions, given patient conformation and panting. The portion evaluated showed a normal wall thickness, with a moderate amount of hyperechoic dependent debris. The cystic and common bile ducts are normal/not visible.

Gastrointestinal Tract

The gastric lumen contains a minimal amount of fluid. The stomach wall is thick (up to 0.60 cm) with a thickened hypoechoic mucosa, with some variability due to rugal folds. There is normal gastric wall layering. There are no masses or focal lesions observed.

The duodenum measures thick (0.55-0.60 cm) with distinct wall layering and mild corrugation. The remainder of the small intestines are normal with normal wall layering. The lumen of the small intestine was empty with no signs of ileus, obstruction or foreign material. No focal lesions observed.

The sections of colon are visualized with formed fecal material and gas shadowing distally.

Pancreas

The area of the pancreas is normal and isoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid. The visible pancreatic duct was normal.

Peritoneum

There is a mild amount of effusion throughout the abdomen, seen best around the spleen and liver, though there is effusion dispersed throughout the loops of intestine. The effusion around the spleen is more anechoic, but between the liver and the diaphragm, the effusion is echogenic. The fat surrounding the cranial abdomen (stomach, liver, portahepatus) was hyperechoic and almost nodular in appearance.

ULTRASONOGRAPHIC FINDINGS

Findings

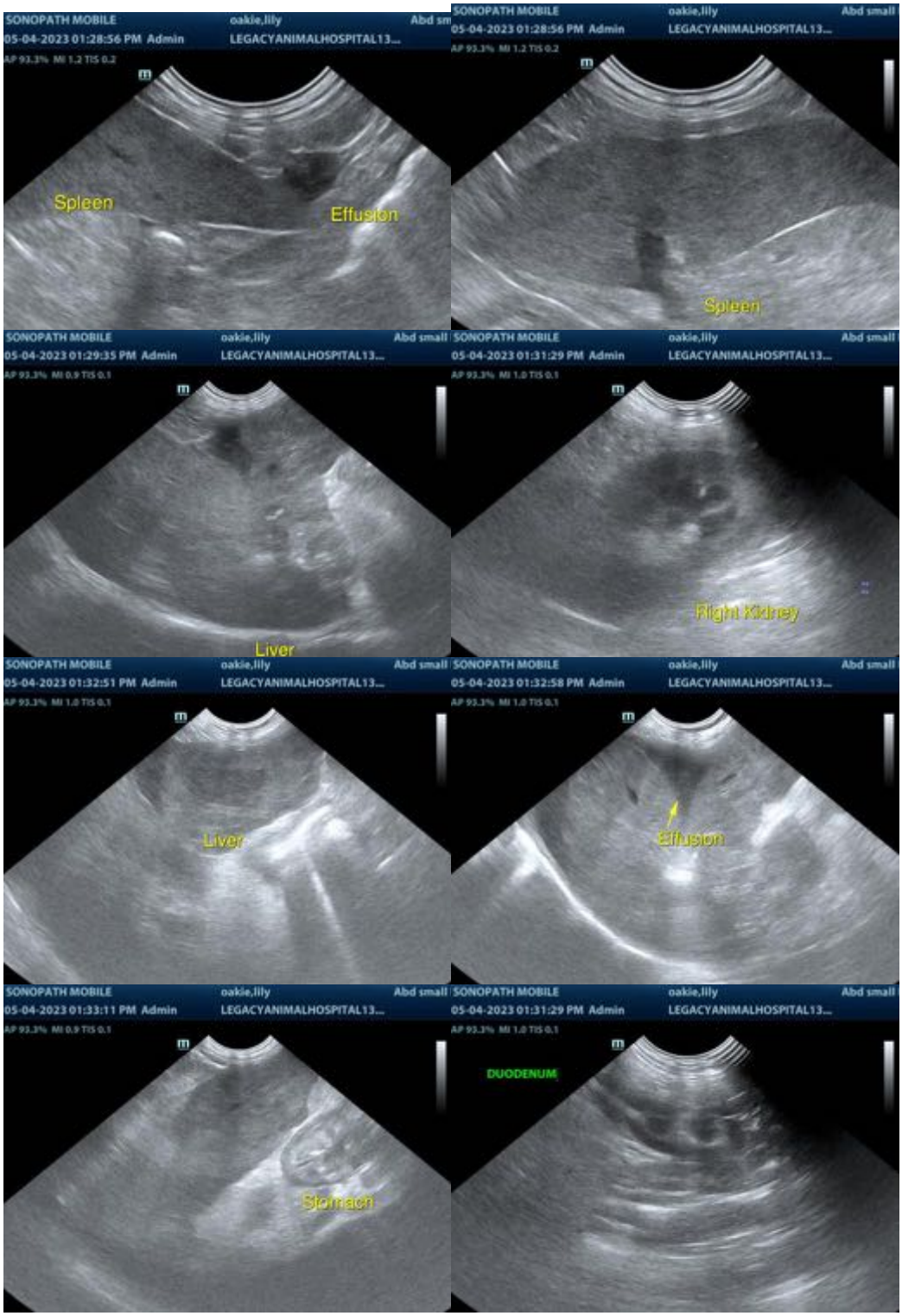
- Nodular changes to the liver with effusion and surrounding inflammation
- Gastroenteritis
- Mottled splenomegaly. Possible splenic nodule.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The changes to the liver would be consistent with diffuse nodular change as seen with vacuolar/glycogen hepatopathy, chronic Inflammatory hepatopathy (with possible acute decompensation given the other changes), copper storage disease, emerging fibrosis, granulomatous disease, etc. Diffuse neoplasia cannot be excluded (such as diffuse hepatocellular carcinoma, diffuse cholangiocarcinoma or round cell neoplasia), though those are not strongly suspected. The echogenic effusion surrounding the liver lobes as well as the inflammation within the portahepatus raises concern for a more active and sinister disease process and cause of clinical illness. Correlate with lab-work. Consider fine-needle aspirate of the liver and the effusion for cytology +/- culture (if coagulation profile is normal).

There is evidence of gastroduodenitis with significant inflammation around the thickened stomach. Continue to treat for acute gastroenteritis with antiemetics and appetite stimulants, but these changes may be secondary to the hepatopathy.

The spleen is also mottled and thick (which could be normal for sedation in certain breeds if that applies in this case). This could be from extramedullary hematopoiesis, lymphoid hyperplasia, infectious disease (e.g., vetor-born or protozoal infections), infiltrative round cell neoplasia cannot be ruled out, though is not necessarily suspected. There is effusion around the spleen, particularly the tail of the spleen, that would also be amenable to aspiration. The fluid at the tail of the spleen in certain images looks more like a nodule. This is suspected to be a collection of effusion. Aspiration of the spleen and effusion/nodule should be considered.


SONOPATH MOBILE
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Abd sm
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LEGACYANIMALHOSPITAL13...
Spleen
Effusion
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DUODENUM

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.

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