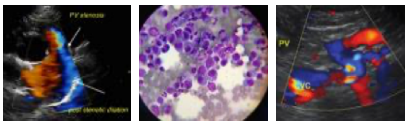
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

DATE

9/10/21

PATIENT

Abby Hibline

SPECIES

Canine

BREED

Maltese Mixed Breed

SEX

Female Spayed

AGE

9/9/10

WEIGHT

11.5 lbs.

INTERPRETED BY

Andrea Nicastro, DVM, Diplomate ACVIM (Small Animal Internal Medicine)

HOSPITAL NAME

Animal Emergency Hospital

REFERRING VET

Dr. Martinoli

INVOICE

12062

PRESENTING CLINICAL SIGNS

History: Presenting Complaint: Vomiting & not eating. Date: 09-10-2021 Notes: Referred from rDVM/Abbey Animal Hospital for continued care. History from rDVM: Dog had extensive dental procedures done approx. 1 month ago. Pre-op bloodwork showed slightly elevated liver values; not sure if was related to severe dental disease. A week after the procedure she returned for a wound/hot spot-on ventral abdomen; skin sloughed; is now healing well. Today presented for vomiting/lethargy/not eating well. They sent out CBC/Chemistry; performed Chem 17 in house which showed ALT - 559/ALP > 1000/GGT - 130, BUN 31, Creat 3.1. Assessment: R/O primary liver disease vs secondary to medications (antibiotics and NSAIDs) and anesthesia from dental procedure one month ago; Immune mediated disease. Plan: Admit to hospital, IV catheter; IV fluids, Recheck Liver and Kidney values in 24 hours abdominal ultrasound.

Current Medications: Famotidine.

Lab Results: ER results attached separately.

Radiographs: Not provided by the veterinarian.

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Sedation: Sedation not required for scan.

Stat Report: STAT report not requested by the veterinarian.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended. A small amount of suspended echogenic debris is observed within the lumen. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

The left kidney is normal in size (4.27 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. A few small nephroliths are visualized. There is no evidence of pyelectasia, infarcts or hydroureter.

The right kidney is normal size (4.61 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. A few small nephroliths are visualized. There is no evidence of pyelectasia, infarcts or hydroureter.

Adrenal Glands

The left adrenal gland is normal size (0.49 cm at cranial pole) (0.55 cm at caudal pole) (1.50 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

The right adrenal gland is normal size (0.53 cm at cranial pole) (0.48 cm at caudal pole) (1.66 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

Spleen

The spleen is diffusely enlarged (2.20 cm in width at the level of the hilus) with slightly swollen peripheral contours. The parenchyma is hypoechoic and subtly mottled in appearance. No focal lesions are observed. Splenic vasculature appears normal with no evidence of thrombosis.

Liver
The liver is subjectively enlarged with swollen to irregular peripheral contours. The parenchyma is hyperechoic relative to the spleen and diffusely heterogeneous in appearance. At least 3 masses/nodules are visualized, the largest measuring 2.77 x 2.58 cm located left to mid liver at the caudal aspect. The second mass measures 2.23 x 2.20 cm and is located deep mid to right liver. The third nodule measures 1.89 x 1.97 cm and is hypoechoic to slightly cavitated and located on the left side. Several small ill-defined hypoechoic nodules are also seen. Vascular and biliary tracts are of normal volume with no evidence of congestion. The gall bladder lumen is distended. The wall is normal in thickness. A moderate amount of suspended echogenic debris is observed within the lumen. The cystic and common bile ducts are normal/not seen.

Gastrointestinal
The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is not distended. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. No obstructive disease is noted.

Pancreas
The body/right limb of the pancreas is prominent to enlarged with minimal deviation from the normal peripheral contours. The parenchyma is slightly hypoechoic relative to surrounding omental fat and diffusely heterogeneous in appearance. No distinct focal lesions are observed. The pancreatic duct is visible but not overtly dilated (0.17 cm in diameter). The mesentery effacing the serosal surface is hyperechoic.

Free Abdomen
The mesentery in the cranial abdomen is hyperechoic. Trace free fluid is suspected. The abdominal lymph nodes are normal/not visible.

ULTRASONOGRAPHIC FINDINGS

Primary Findings:

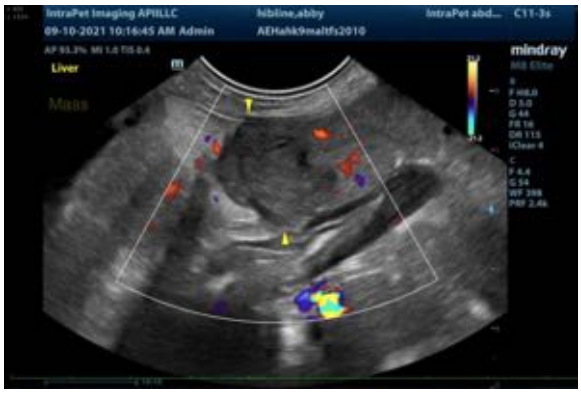
- Multiple hepatic masses. Differentials include neoplasia, multifocal abscessation, granulomas, other. The diffuse hepatic parenchymal changes are non-specific and could be secondary to inflammatory/immune mediated disease, infiltrative neoplasia, benign age-related pathology, other.
- The splenic parenchymal changes are concerning for infiltrative neoplasia (i.e., round cell tumor). However, benign pathology (i.e., extramedullary hematopoiesis, splenitis or lymphoid hyperplasia) cannot be completely excluded.
- The pancreatic changes are consistent with chronic active pancreatitis.
- Cranial peritonitis, likely secondary to hepatic, splenic and/or pancreatic pathology.

Secondary Findings:

- Bilateral age-related renal changes with dystrophic mineralization and non-obstructive nephroliths.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS
- Three-view thoracic radiographs are recommended to assess for pulmonary metastases.

- Consider a fine needle aspirate of the spleen (if clotting status is appropriate). A 25-gauge needle should be used. Aspirates of the liver masses can also be considered. However, given that some of the masses are cavitated, there is a risk of iatrogenic hemoabdomen with aspiration. If cytology results are inconclusive, consider an abdominal exploratory with hepatic and splenic biopsies +/- splenectomy to get a definitive diagnosis.




IntraPet Imaging APIILLC
hibline,abby
IntraPet abd... C11-3s
09-10-2021 10:18:47 AM Admin
AEHahk9maltfs2010
mindray
LT
Lt adr
1 Dist 1.50 cm
2 Dist 0.49 cm
3 Dist 0.59 cm


IntraPet Imaging APIILLC
hibline,abby
IntraPet abd... C11-3s
09-10-2021 10:19:05 AM Admin
AEHahk9maltfs2010
mindray
Spleen


IntraPet Imaging APIILLC
hibline,abby
IntraPet abd... C11-3s
09-10-2021 10:20:00 AM Admin
AEHahk9maltfs2010
mindray
RT
RK


IntraPet Imaging APIILLC
hibline,abby
IntraPet abd... C11-3s
09-10-2021 10:20:23 AM Admin
AEHahk9maltfs2010
mindray
RT
Rt adr
1 Dist 1.66 cm
2 Dist 0.52 cm
3 Dist 0.53 cm


IntraPet Imaging APIILLC
hibline,abby
IntraPet abd... C11-3s
09-10-2021 10:16:16 AM Admin
AEHahk9maltfs2010
mindray
Liver
Stomach


IntraPet Imaging APIILLC
hibline,abby
IntraPet abd... C11-3s
09-10-2021 10:19:45 AM Admin
AEHahk9maltfs2010
mindray
Si


IntraPet Imaging APIILLC
hibline,abby
IntraPet abd... C11-3s
09-10-2021 10:20:39 AM Admin
AEHahk9maltfs2010
mindray
RT
Liver mass

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.

Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)
Andrea.nicastro@sonopath.com