

IMAGING PERFORMED BY

IntraPet.com



SonoPath

Clinical Sonography & Telecytology

EDUCATIONAL TELECONSULTATION SERVICES™

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

DATE PRESENTING CLINICAL SIGNS

3/2/23 Increased panting recently. Evidence of mid abdominal mass on AXR.

PATIENT Current Medications: Carprofen 100 mg PO SID, Gabapentin 300-600 mg PO BID PRN
Radiographs: TXR WNL.

Diesel Mohammadi Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.

SPECIES Stat Report: STAT requested.
Imaging Performed By: Rachel Brillhart, RDMS.

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

BREED *Urinary System*

Hound X The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

SEX

Neutered Male The prostate is normal in size (1.22 cm) and shape for this neutered male dog. The parenchyma is homogenous and the external margins are smooth. The prostatic urethra appears normal with no evidence of irregularity, invasion, mass effect or calculi.

AGE

2/7/11 The left kidney has a normal shape and size (7.09 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

WEIGHT

71 Pounds

INTERPRETED BY

Kathleen Sennello DVM,
MS, Diplomate ACVIM
(Small Animal Internal
Medicine)

The right kidney has a normal shape and size (6.42 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

HOSPITAL NAME

Timonium AH

The left adrenal gland is large and slightly irregular, measuring 1.91 cm at the cranial pole, 1.32 cm at the caudal pole, and 3.88 cm in length. It is observed in its normal position cranial to the left renal artery. It is somewhat irregular in that it is large and slightly "chunky" in appearance, and the cranial pole appears slightly more hypoechoic than the caudal pole and creates the effect of a hypoechoic nodule measuring approximately 2.08 cm x 1.7 cm. No evidence of vascular invasion is visualized.

REFERRING VET

Dr. McIntyre

The right adrenal gland is large and slightly "chunky" in appearance, measuring 1.13 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

INVOICE

45612

Spleen

The spleen is large and irregular. The spleen echotexture is heterogenous and mottled, the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. There is a very large mixed echogenic, cavitated mass effect arising from the spleen measuring > 10.42 cm x 8.8 cm.

Liver

The liver is subjectively normal in size, and hypoechoic with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

The gallbladder lumen is moderately distended. Luminal contents are mild and primarily anechoic. The wall of the gall bladder is not thickened and has a smooth mucosal surface. There is a very small hypoechoic lesion visualized between the gallbladder wall and the hepatic parenchyma. The nature of this lesion is uncertain. Recommend continued monitoring. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. The duodenum measured as normal (between 0.3-0.5cm in wall thickness) and the jejunum measured as normal (between 0.2-0.47cm.) Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

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.

Free Abdomen

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

Other

The right auricle and pericardium were visualized and were unremarkable. No obvious pathology is visualized. If cardiac function evaluation is desired a full echocardiogram is warranted. There is no evidence of pleural effusion or thoracic nodules visualized.

ULTRASONOGRAPHIC FINDINGS

- Bilateral adrenomegaly with slightly irregular adrenals and a subtle hypoechoic nodule at the cranial pole of the left adrenal gland – The bilateral adrenomegaly could be consistent with bilateral hyperplasia (e.g., secondary to pituitary-dependent hyperadrenocorticism), bilateral infiltrative neoplasia, inflammatory adrenal disease, other. Correlation with clinical findings is recommended. The hypoechoic nodule could represent hyperplasia, possibly a mass effect, metastatic lesion, etc. It is fairly subtle at this time.
- Large, mixed echogenic cavitated splenic mass – A large, heterogenous mass with cavitations is present within the splenic parenchyma. The mass distorts the splenic capsule. Differentials for the mass include neoplasia (e.g., hemangiosarcoma, hemangioma), hematoma, abscess, other. A neoplastic process is favored.
- Hypoechoic heterogeneous liver – The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy.

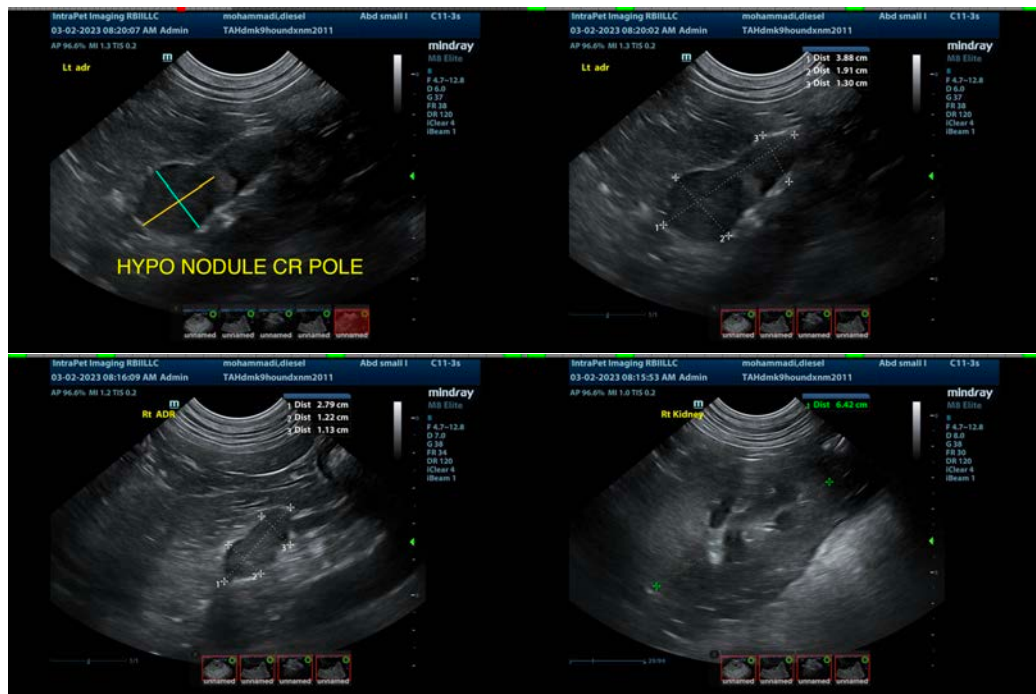
- Small, hypoechoic lesion near the gallbladder – The significance of this lesion is unknown. It is likely incidental at this time but continued monitoring is warranted. This could represent a cystic lesion, an early neoplastic lesion, a benign nodule, etc.

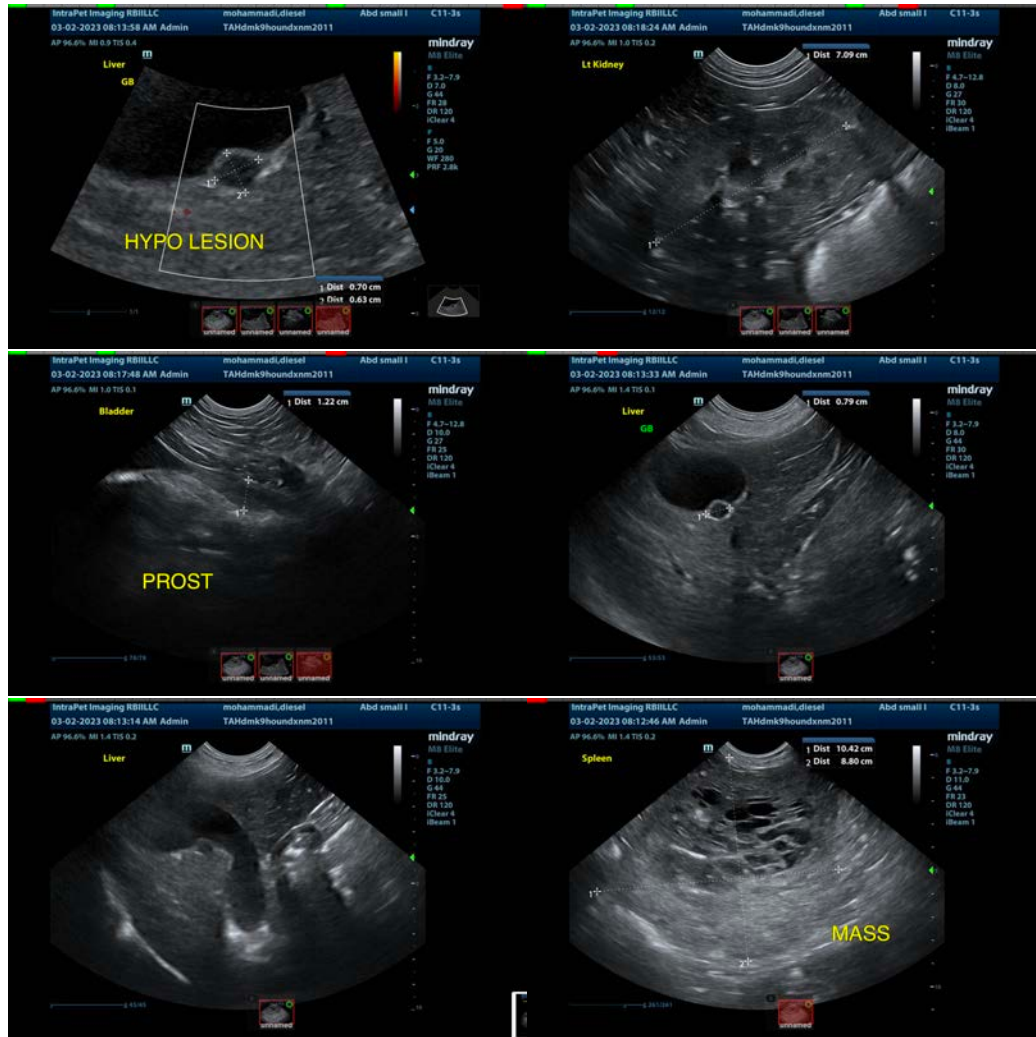
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is a large cavitated mixed echogenic splenic mass visualized on today's exam. Recommend a splenectomy for both diagnostic and therapeutic purposes, provided 3-view thoracic radiographs are normal.

Additionally, both adrenal glands appear somewhat enlarged and slightly irregular, and there is a hypoechoic irregularity at the cranial pole of the left adrenal gland. This could represent focal hyperplasia, etc., or less likely could represent a mass effect, metastatic lesion, etc. Recommend blood pressure evaluation and catecholamine levels if hypertension is present. Additionally, recommend evaluation of the adrenals at surgery. If the large prominent mass effect is visualized, you could consider unilateral adrenalectomy, or consider continued monitoring with ultrasound, and adrenal function testing if signs of Cushing's are present in the future.

The significance of the small hypoechoic nodule adjacent to the gallbladder is unclear. At this time, it does not appear to be causing any inference with the gallbladder. This could be an incidental nodule, a cystic lesion, or even a small metastatic lesion. Continued monitoring is warranted.





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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)
 kathleen.sennello@sonopath.com