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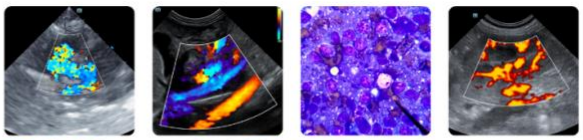

Clinical Sonography & Telecytology
Educational Teleconsultation Services™

PATIENT

Freyja Dean

SPECIES

Canine

BREED

German Shepherd

SEX

Female Intact

AGE

April 01, 2017

WEIGHT

81 LBS 36.7414 KG

INTERPRETED BY

Andrea Nicastro DVM
Diplomate ACVIM
(Sm Animal Internal Med)

IMAGING PERFORMED BY

Andrea Nicastro DVM
Diplomate ACVIM
(Sm Animal Internal Med)

HOSPITAL NAME

Sun Dog Cat Moon

REFERRING VET

Fetterolf

INVOICE

22859

DATE

4-13-26

PRESENTING CLINICAL SIGNS

Clinical Exam Findings: Presented on 4/6/2026 for mass along ventral abdomen>
- Last heat cycle approximately 3 months ago, regular 6-month cycles
- Mass noticed within past few days
PE - Urogenital: Firm, irregular mass located to the left of ventral midline between last two mammae, measuring 45mm wide x 63mm long, associated with mammary chain. Aspirated approximately 20cc serosanguineous fluid.

Examination Type: 3 view Thoracic radiographs with partial cranial abdomen
Findings:
- Cardiac Silhouette: Mild enlargement noted, likely related to thoracic conformation. No murmur or arrhythmia detected clinically.
- Pulmonary Parenchyma: No evidence of nodules or masses.
- Pulmonary Vasculature: Normal appearance.
- Pleural Space: No evidence of heart failure.
- Stomach: Contains food material.
- Skeletal Structures: Mild spondylosis present.
Conclusions/Impressions: No radiographic evidence of pulmonary metastases. Mild cardiac enlargement is likely related to patient conformation given absence of clinical signs of cardiac disease. Patient cleared for surgery from radiographic standpoint.
Recommendations: Auscultation of the heart is recommended one more time prior to surgery. Consider Cardiac ProBNP and ECG if there are any cardiac concerns prior to anesthesia. If abnormal results are obtained, consider cardioprotective anesthetic protocols or cardiology consultation.

Sr. Wellness Panel. Chem Globulin 3.7 1.6-3.6 g/dL HIGH. CBC Eosinophils 1320 11 0-1200 /mL HIGH. Positive for Lyme and Anaplasma Antibodies.

Cytology: SOURCE: 20 cc of serosanguineous fluid aspirated from a firm, irregular mass that is 45 x 63 mm to the left of the ventral midline between the last two mammaes. Fluid submitted

Description: The smears consist of scattered macrophages with amorphous debris in a lightly hemodiluted, basophilic tissue fluid background. Most of the macrophages contain amorphous basophilic material within their cytoplasm, which is most consistent with either milk protein or hemosiderin. A few neutrophils are noted throughout the smears. No evidence of inflammation or neoplasia is observed.
MICROSCOPIC FINDINGS: PROBABLE MAMMARY CYST
COMMENTS:
Mammary cysts are considered a dysplastic process involving dilated ducts. They most often occur in middle age to older animals, and present as well circumscribed masses that often have a blue appearance. Aspiration yields amber to brown to green fluid. Mammary cysts may occur within neoplasms. Therefore, while neoplasia is not observed within the submitted samples, histopathologic examination is highly recommended to rule out concurrent mammary neoplasia.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder wall is normal in thickness. The mucosal surface in the region of the apex is slightly irregular. The bladder is moderately distended. Luminal contents are anechoic. No cystic calculi are observed. The region of the trigone and visible portion of the proximal urethra are normal.

The left kidney is normal in size (7.67 cm in length) with a normal shape, architecture and smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

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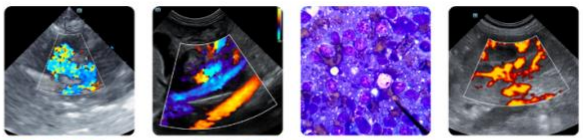

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The right kidney is normal in size (7.75 cm in length) with a normal shape, architecture and smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size (0.61 cm at cranial pole) (0.56 cm at caudal pole) with a normal shape and 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 in size (1.10 cm at cranial pole) (0.67 cm at caudal pole) with a normal shape and 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 subjectively normal-in-size with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

Liver

The liver is subjectively normal in size with normal peripheral contours. The parenchyma is hypoechoic relative to the spleen. A 2.21 x 1.78 cm hypoechoic mass is observed on the right side. In addition, several smaller hypoechoic nodules are seen. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion. The portal vein to caudal vena cava ratio is approximately 1: 1.

The gallbladder is of normal contours and contains some dependent echogenic debris. The wall is normal in thickness. No choleliths are observed. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The gastric lumen is minimally fluid-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 is normal in thickness with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The ileocecocolic junction and colonic wall are normal. There is no evidence of an obstructive pattern.

Pancreas

The region of the pancreas is isoechoic relative to surrounding omental fat. No obvious parenchymal abnormalities are observed. There is no evidence of regional inflammation or effusion.

Lymph Nodes

The abdominal lymph nodes are normal/not visible.

Free Abdomen

There is no obvious evidence of free fluid.

Other

The left and right uterine horns and the uterine body are visible. The uterine body measures 0.63 cm in width). No obvious pathology is observed. The ovaries are subjectively normal-in-size (left 1.52 x 0.73 cm) (1.75 x 0.71 cm). No obvious pathology is observed.

A brief echocardiogram reveals no evidence of pericardial effusion or obvious right atrial/auricular mass.

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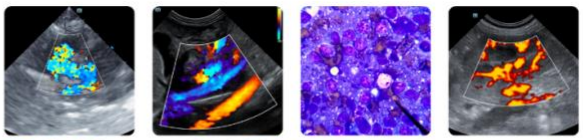

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ULTRASONOGRAPHIC FINDINGS

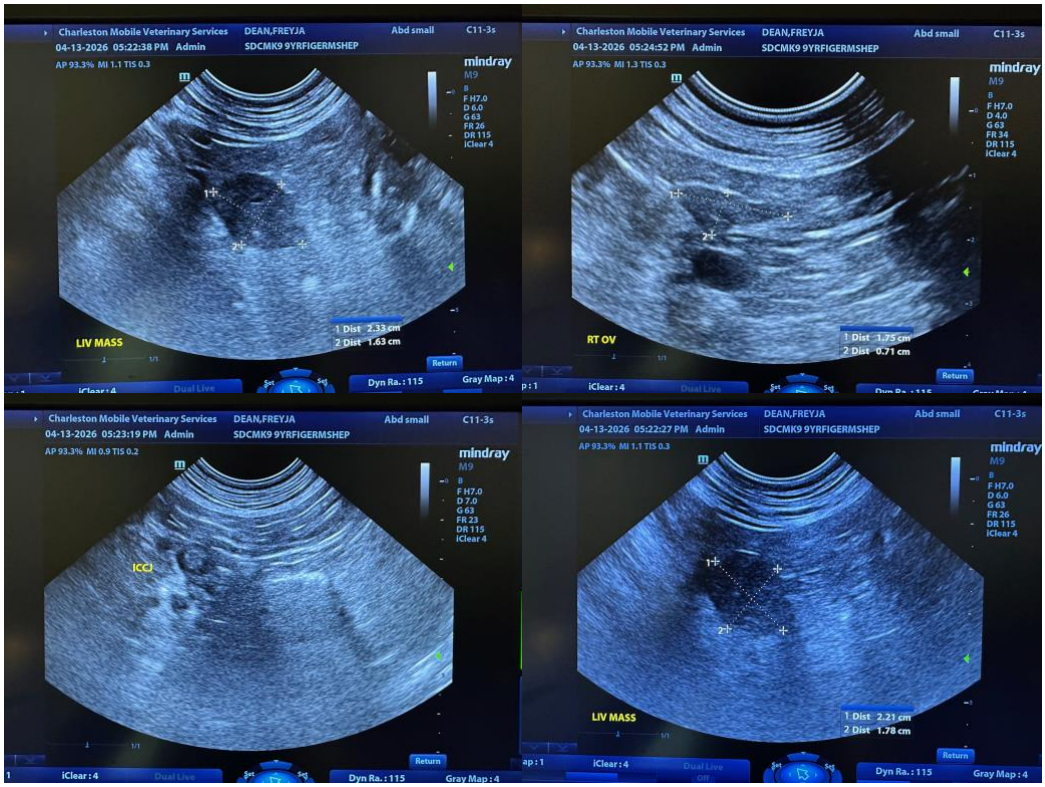
Right liver mass. Neoplasia (i.e., adenoma, adenocarcinoma, round cell tumor, carcinoma) is suspected. However, a benign process (i.e., regenerative nodule or inflammatory focus) cannot be excluded. The smaller hypoechoic nodules could be consistent with metastatic disease or a benign process (i.e., regenerative nodules).

Secondary Findings

Bilateral nonspecific age-related renal changes

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

If there is no evidence of pulmonary metastatic disease, consider referral to a board-certified surgeon to discuss ovariohysterectomy, liver mass removal, and mammary mass removal. An abdominal CT scan would be useful in presurgical planning for removal of the hepatic mass. If further diagnostics are not pursued, palliative care is recommended.



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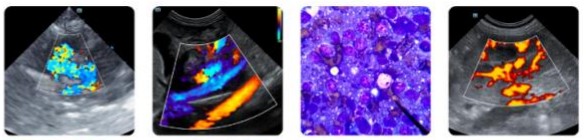

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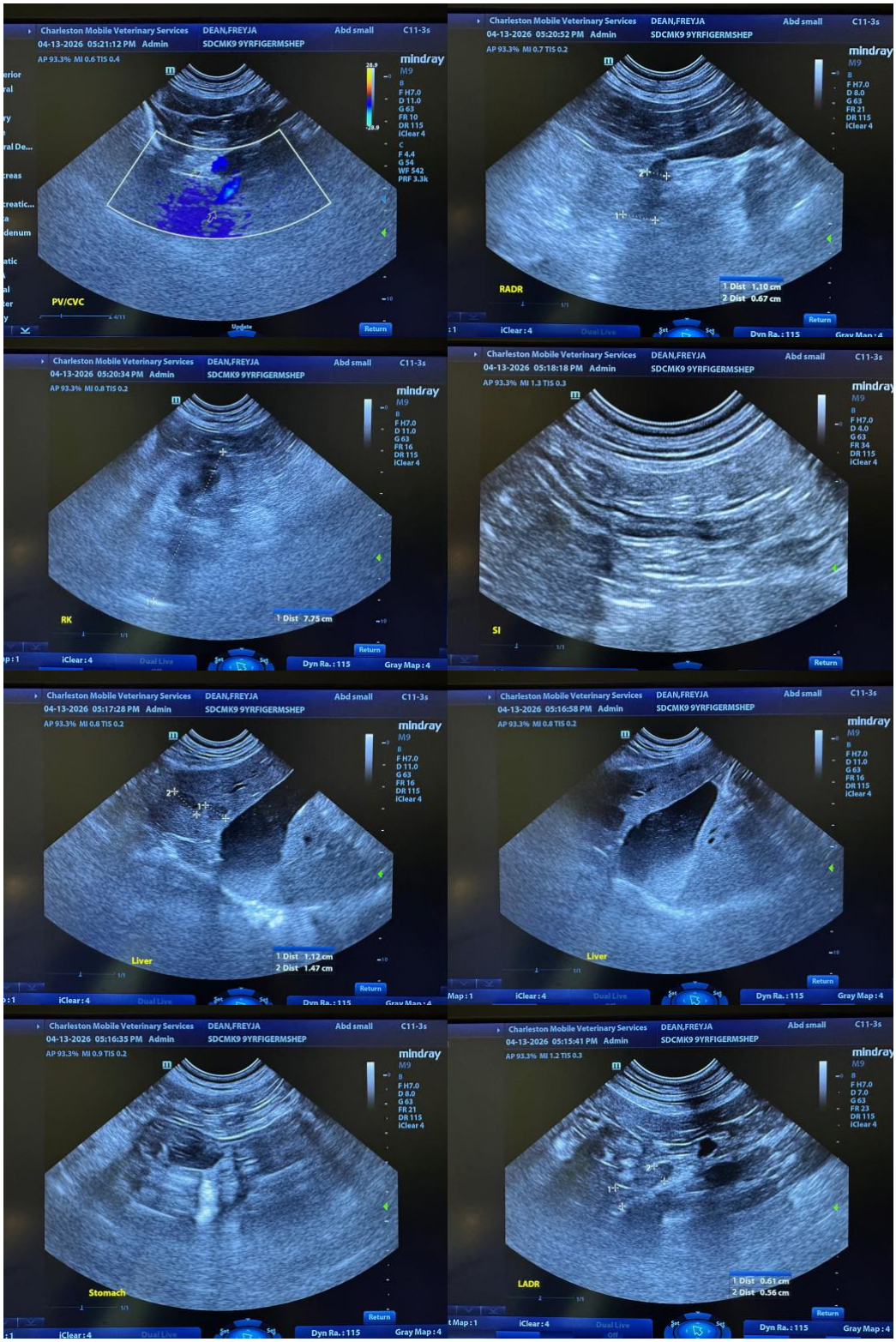

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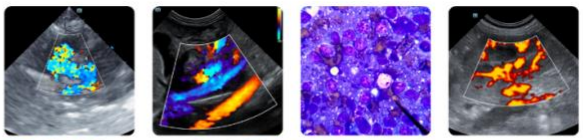

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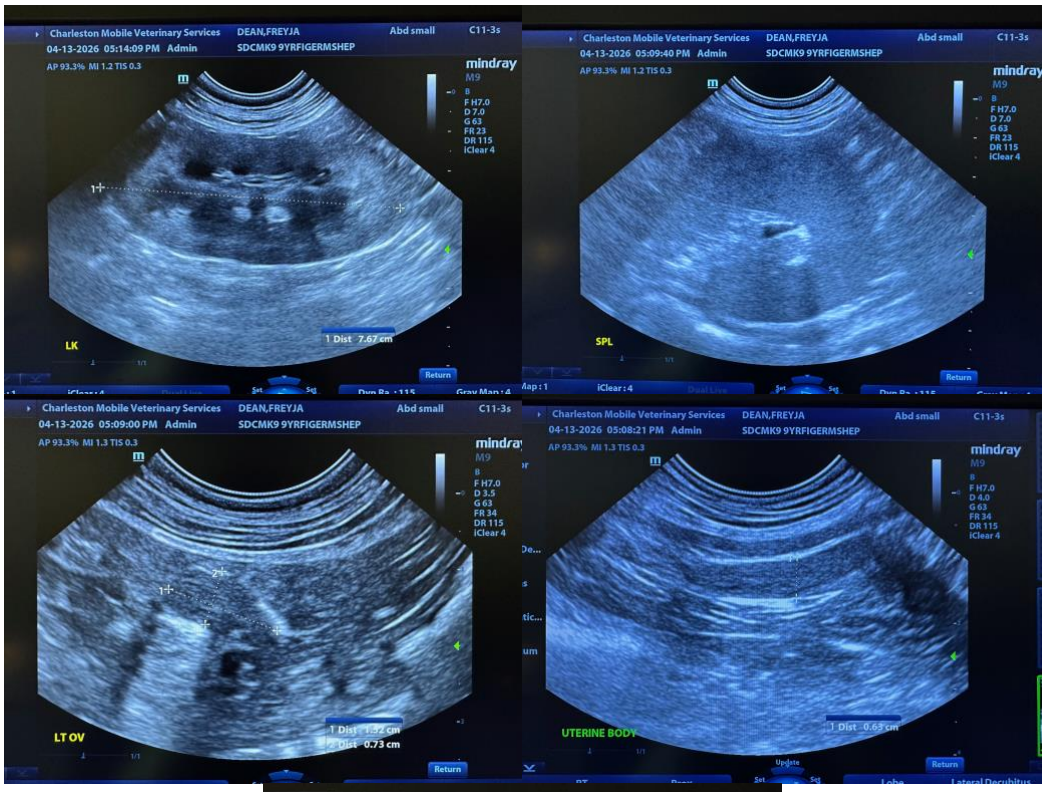

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Andrea Nicastro, MPH, DVM, Diplomate DACVIM (Small Animal Internal Medicine)
info@SonoPath.com