



**PATIENT**

Hannah Richardson

**SPECIES**

Canine

**BREED**

Mixed

**SEX**

Spayed Female

**AGE**

12 Years

**WEIGHT**

58.8 Pounds

**INTERPRETED BY**

Eric Lindquist, DMV

DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Dr. John Ammeraal

**HOSPITAL NAME**

Sova Animal Hospital

**REFERRING VET**

Dr. John Ammeraal

**INVOICE**

37019

**DATE**

4/20/22

**PRESENTING CLINICAL SIGNS**

Left adrenal mass present for 9 months 1.8 cm at cranial pole and grew to 2.38cm, lethargic for the past couple of days. no mass seen in july 2021

Abnormal PE/Chem/CBC/UA Results: Alt 129 u/l, rbc 4.03, hct 24.7%, hgb 8.2, mcv 61.3 fL, mch 20.3, rdw 26.9% retic., 552.1, wbc 17.51, neu 12.15, mono 1.85, plt 60, mpv 18.6, pct 0.11%

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The **urinary bladder**, trigone, and pelvic urethra presented normal thicknesses and normal tone. The ureters were not visible which is normal. No uroliths or sediment were visualized and anechoic urine was present. No evidence of inflammatory or neoplastic changes were noted. Ureteral papillae were normal.

The **kidneys** revealed largely normal size and structure, corticomedullary definition and ratio (cortex 1/3 of medulla) were essentially maintained with some age-related loss of curvilinear patterns regarding the capsule and C/M junction. The cortices presented largely uniform texture with some increased echogenicity expected for his age patient. Medullary structure differed distinctly from that of the cortex and no evidence of pelvic dilation was present. The left kidney measured 6.57 cm. The right kidney measured 6.0 cm

**Adrenal Glands**

The **left adrenal gland** measured 0.84 cm at the caudal pole. The cranial pole revealed a 2.4 cm round mass, consistent with adenoma, or possible carcinoma or pheochromocytoma. This may be related to the splenic pathology. The **right adrenal gland** measured 0.80 cm at the cranial pole and 0.60 cm at the caudal pole.

**Spleen**

The **spleen** revealed an expansive, mixed hypoechoic, undifferentiated 7.6 cm mass with hyperechoic surrounding fat. Regional free fluid noted. Other nodular changes and expansive masses noted in the spleen, consistent with a multicentric splenic process. Portions of the mass appeared to extend into the regional omentum. Therefore, clean resection is unlikely.

**Liver**

The **liver** presented minor heterogeneous changes. No obvious cavitated lesions. The gallbladder was unremarkable.

**Gastrointestinal**

Examination of the **gastrointestinal tract** revealed a stomach and intestine free of stasis, of normal wall thickness, acceptable curvilinear mural detail, and peristaltic activity. Small and large intestine demonstrated normal luminal chyme and stool consistency respectively. No obstructive or overt infiltrative disease was noted. No associated abnormal lymphatic activity was noted.

**Pancreas**

The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Pancreatic duct and capsular contour were acceptably normal and parenchyma respected normal curvilinear patterns. No overt evidence of active inflammatory or neoplastic disease was noted.



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**Free Abdomen**

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A large amount of free fluid noted in the abdomen as well as enhanced omentum.

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**ULTRASONOGRAPHIC FINDINGS**

- Ruptured splenic masses with omental involvement – splenic hemangiosarcoma likely.
- Unremarkable liver
- Left adrenal mass

**BREED**

Mixed

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

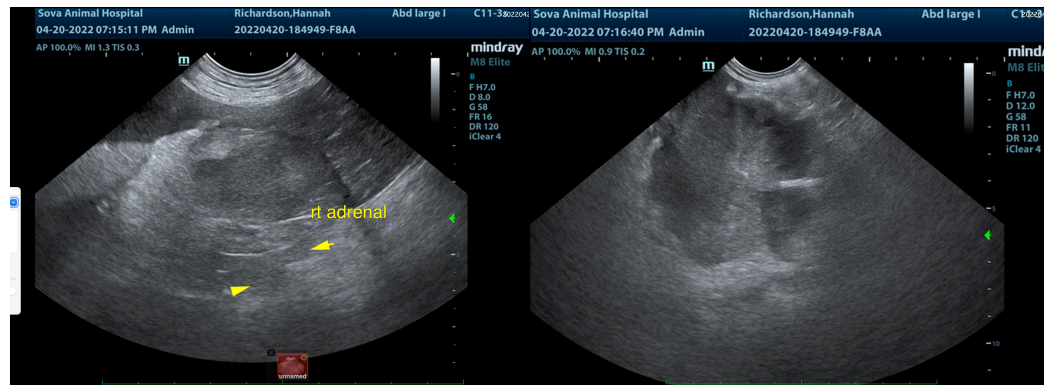
No obvious hepatic metastatic disease, yet micrometastasis cannot be ruled out. Recommend chest radiographs and rapid echocardiogram to assess right auricular or pericardial metastasis. If the heart and chest are free of evident pathology, then exploratory surgery could be considered. However, clean resection is unlikely, given the multiple masses and omental involvement. Seeding into the omentum is a strong potential. Splenectomy and left adrenalectomy would be appropriate. However, adjunctive chemotherapy will be necessary in this case in all probability.

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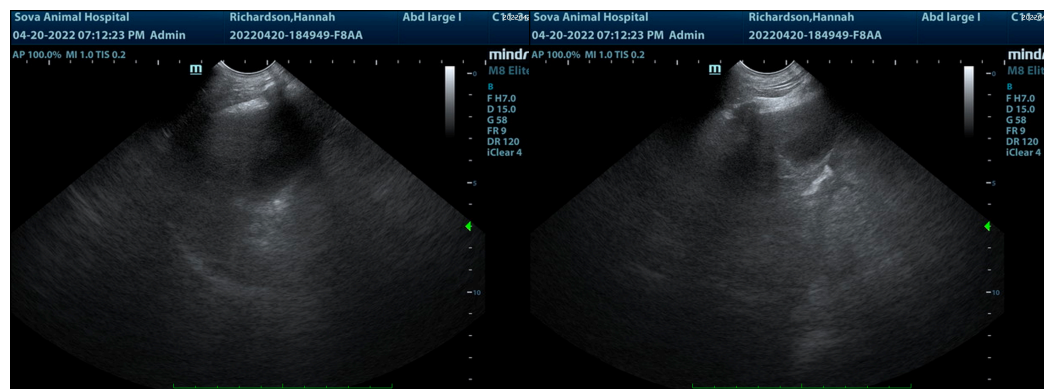
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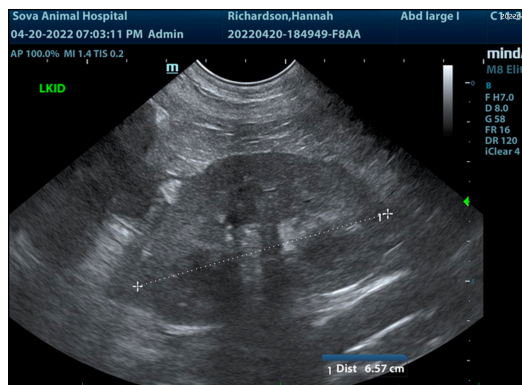
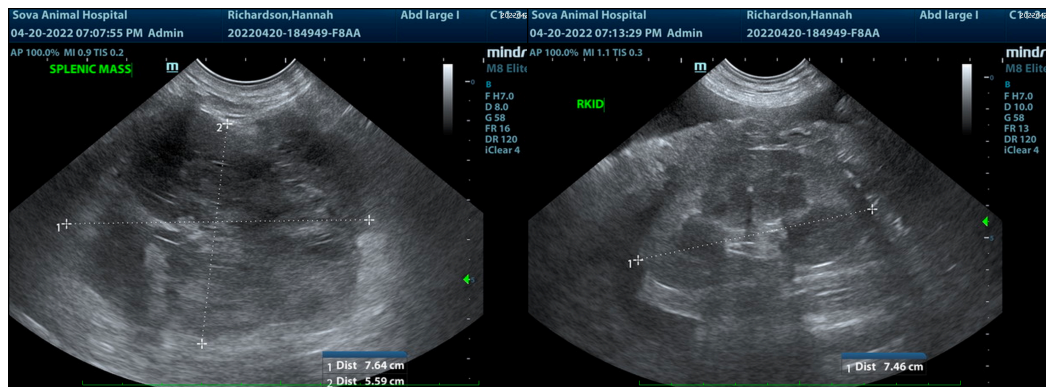
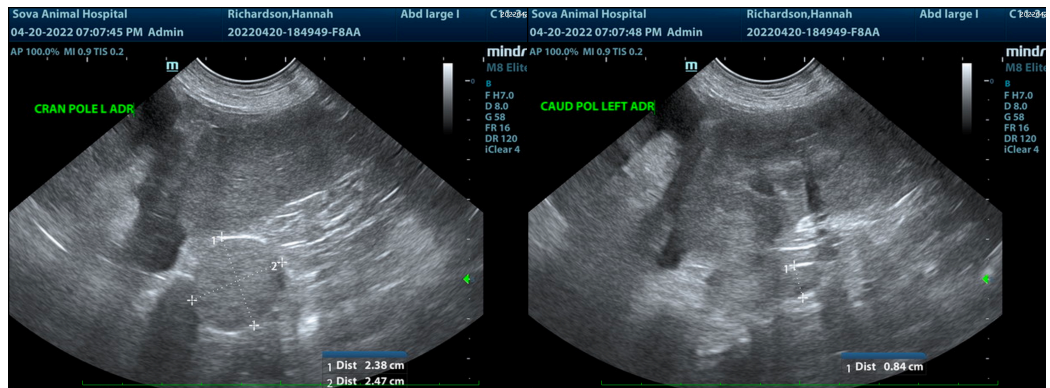
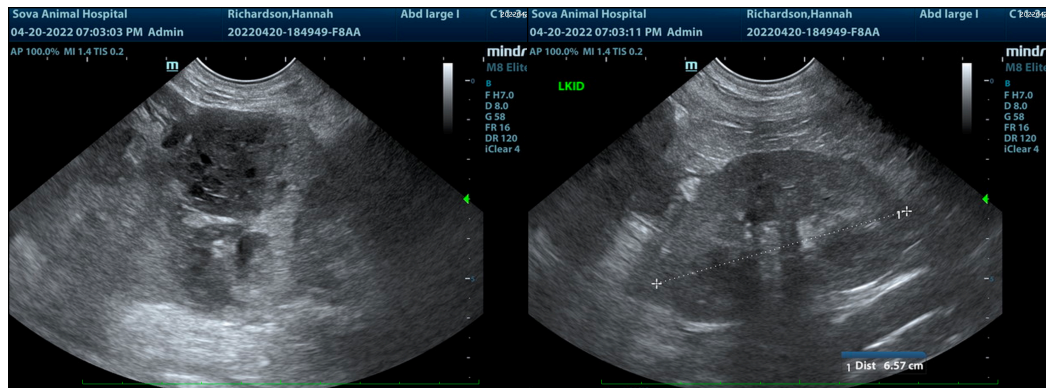
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**The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.**

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.

**Eric Lindquist, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com**

[info@SonoPath.com](mailto:info@SonoPath.com)