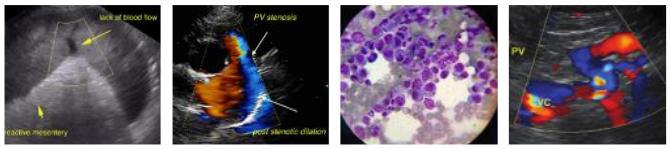
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT

Shannon Rose Pagan

SPECIES

Canine

BREED

German Shepherd

SEX

Intact Female

AGE

2 Years

WEIGHT

N/A

INTERPRETED BY

Eric Lindquist, DMV DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Diane McFadden

HOSPITAL NAME

Vetco Total Care Kinnelon

REFERRING VET

Dr. Eisenberg

INVOICE

20229

DATE

12/23/22

PRESENTING CLINICAL SIGNS

History: Discrepancy about reproductive status. Previous scan indicated intact female. another hospital indicated spay scar and a quick laparotomy indicated uterine stump

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 pelvic urethra was imaged 3.0 cm beyond the cystourethral junction.

The **kidneys** revealed normal size and structure, corticomedullary definition and ratio for this age. The cortices presented largely uniform texture with normal echogenic relationship to liver and spleen. Medullary structure differed distinctly from the cortex and no evidence of pelvic dilation was present. The capsules were acceptably uniform without significant irregularities. The left kidney measured 6.2 cm. The right kidney measured 6.46 cm.

Adrenal Glands

Both **adrenal glands** were visualized and recognized as having normal shape, size, position and echogenicity for this breed. The phrenic vasculature, glandular echogenicity and detail were unremarkable. Capsule, cortex, and medullary definition were normal for this age patient.

Spleen

The **spleen** presented a smooth homogeneous parenchyma hyperechoic to liver and renal cortical parenchyma. The capsule was smooth without noticeable expansion or deviation from within the spleen or adjacent pathology. The splenic vasculature demonstrated normal volume without signs of congestion or thrombosis. No sonographic evidence of acute or chronic inflammatory, neoplastic, or infarctual changes were noted.

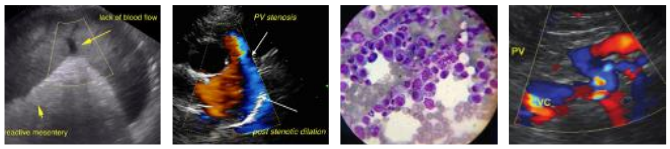
Liver

The **liver** images submitted revealed subjectively normal liver size, contour, and structure. Parenchymal echogenicity was naturally coarse and hypoechoic to the spleen. Vascular and biliary tracts were of normal volume with no evidence of congestion. The gallbladder presented acceptably thin walls with primarily anechoic content. The cystic and common bile ducts were normal. No pathological hepatic lymphadenopathy was evident. No overt structural evidence of inflammatory, infiltrative or regenerative pathology was evident.

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



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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.

Other

The **uterine** body in this patient was persistently present and excessively thickened, measuring maximum width at the level of the cystourethral junction, 1.5 cm. The cranial body of the uterine base measured 0.8 cm. This is excessively thickened for a spayed female. The length of the visible uterus was approximately 5.0 cm and extended beyond the apex of the urinary bladder, which was mildly repleted at the time of the sonogram.

The uterine horns were not visible in this patient; therefore, I believe that a partial spay procedure was performed yet ovarian remnants are probable, which would make the uterus appear normal in width and fairly normal in length with the lack of the uterine horns present.

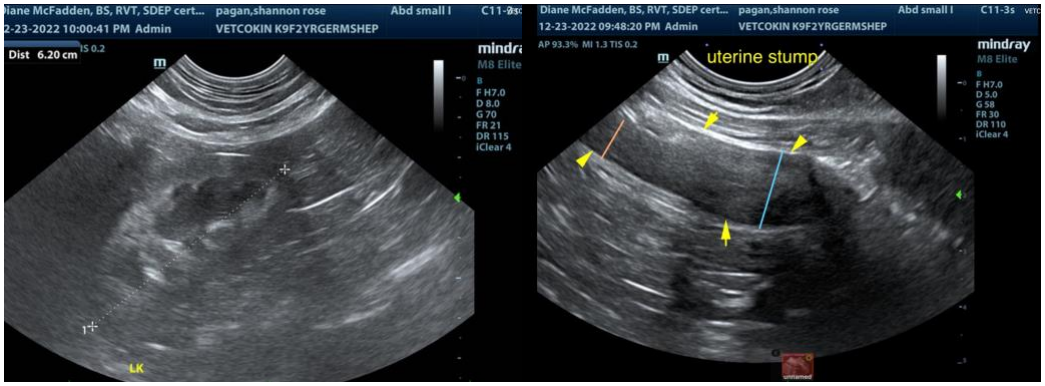
The left ovarian fossa revealed slight heterogenous hypoechoic tissue, a grouping of which measured approximately 1.2 cm. The right ovarian fossa revealed similar hypoechoic irregular tissue, measuring approximately 1.2 cm with a focal nodule, measuring 8.0 mm. It is difficult to say if the structures in the ovarian fossa are residual ovarian remnants, but if the patient enters into an active heat cycle, then the structures in the ovarian fossa would be much more prominent. Typically, a spayed female would have a much more reduced uterine stump, approximately half of the current uterine stump width, as well as more of an isoechoic retracted appearance. I'm strongly concerned for residual ovarian remnants and potentially both ovarian fossae.

ULTRASONOGRAPHIC FINDINGS

- Uterine body persistently present and excessively thickened
- Slight heterogenous hypoechoic tissue in the left ovarian fossa
- Similar hypoechoic irregular tissue in the right ovarian fossa

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The options are to repeat exploratory surgery, resect the extended uterine stump to the level of the cervix as well as inspect and remove any residual tissue in both ovarian fossa, or wait until the patient has potential signs of heat, in which the potential ovarian remnants would be much more visible. I do believe this patient is at significant risk for eventual stump pyometra, therefore proactive removal of the remainder of the 5.0 cm x 1.5 cm uterine base, as well as inspection and removal of any residual tissue embedded in the fat and the ovarian fossa would be appropriate.



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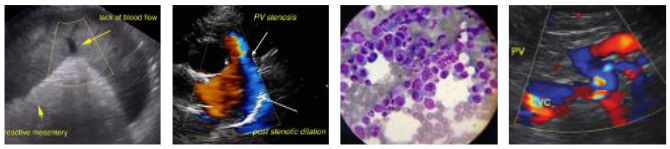

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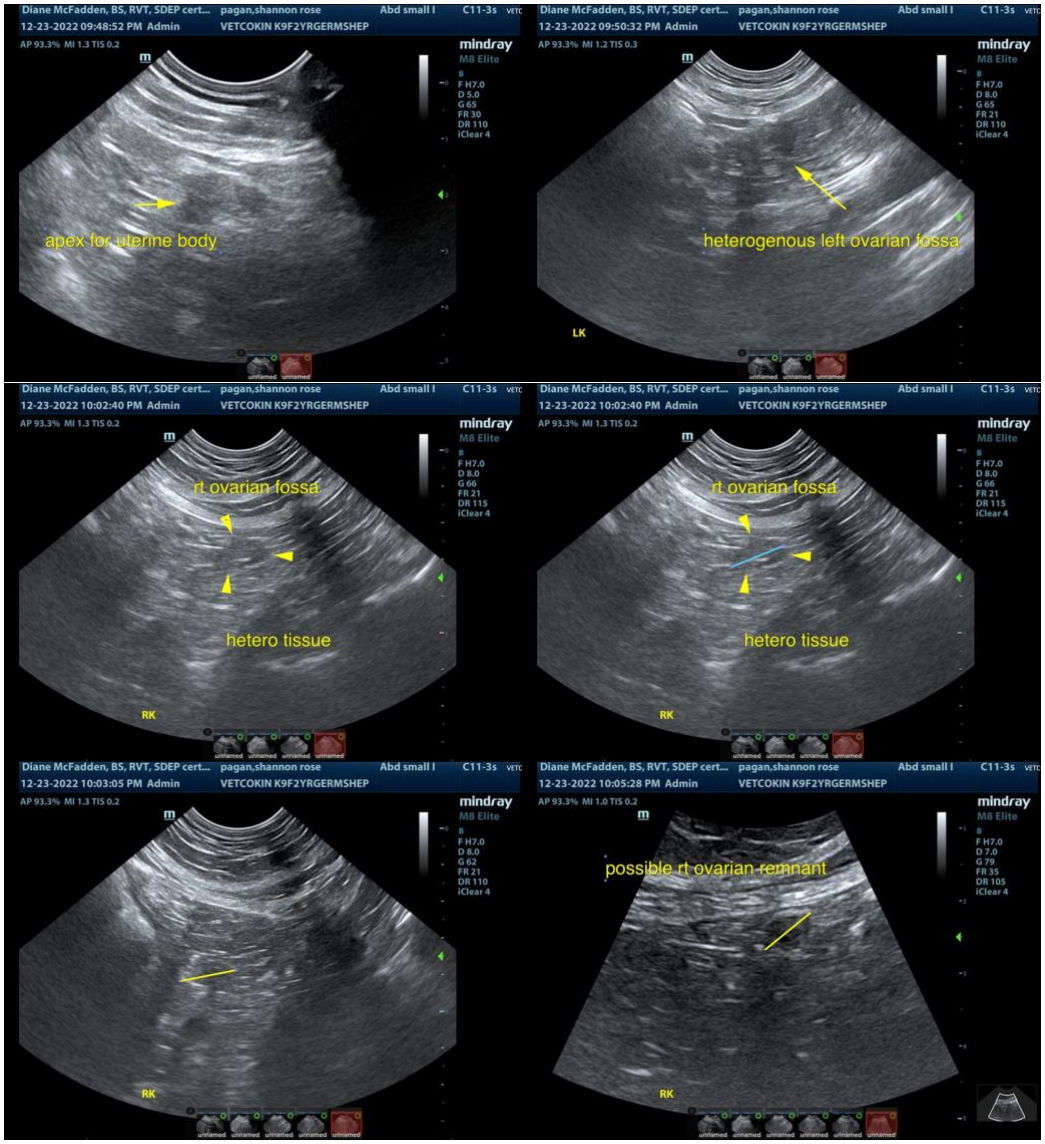

The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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