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Mobile Ultrasound

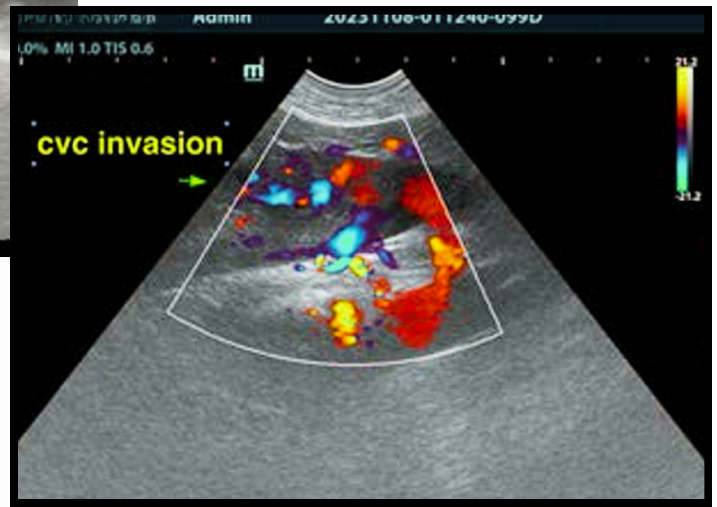
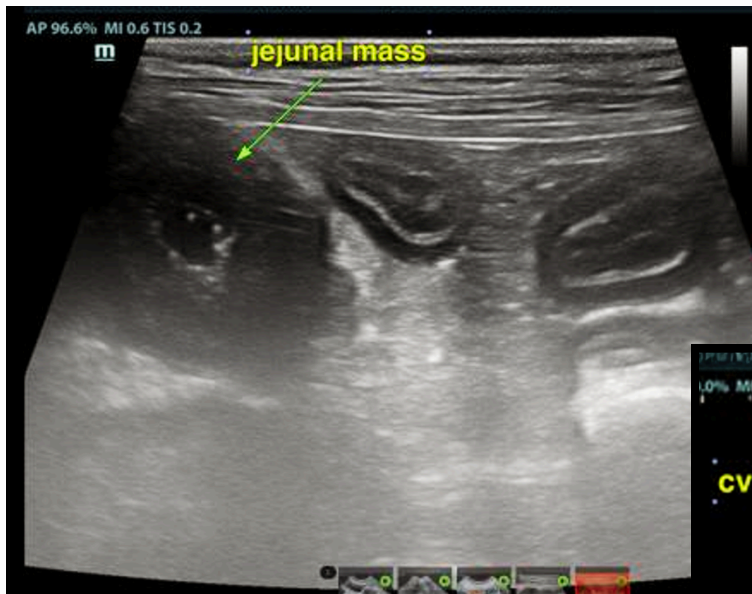
- Comprehensive and thorough diagnostic ultrasound available in the comfort and convenience of your OWN practice.
- Your patient can get the advanced imaging it needs without a long drive and full day needed to visit a referral hospital.
- Most cases are scheduled within days of the request and STAT cases can be arranged when indicated.
- We complete your patient's scan with a Mindray Elite 8 machine, which is a high performing portable human grade ultrasound with 4 transducers to easily complete scanning on pets of ALL sizes.



- Ultrasound offers deeper clinical insight by evaluating internal pathology and can lead to a diagnosis with the best treatment options for your patients.
- Ultrasound is a non-invasive imaging modality that is typically low stress for patients. Light sedation and/or pre-hospital visit medications can be very helpful to allow the pet to relax and improve imaging quality.
- We know how busy veterinary practices are and that efficiency is key to workflow as well as working towards a diagnosis for your patients. Our goal is to work quickly and help your clients make the best decisions for their pets

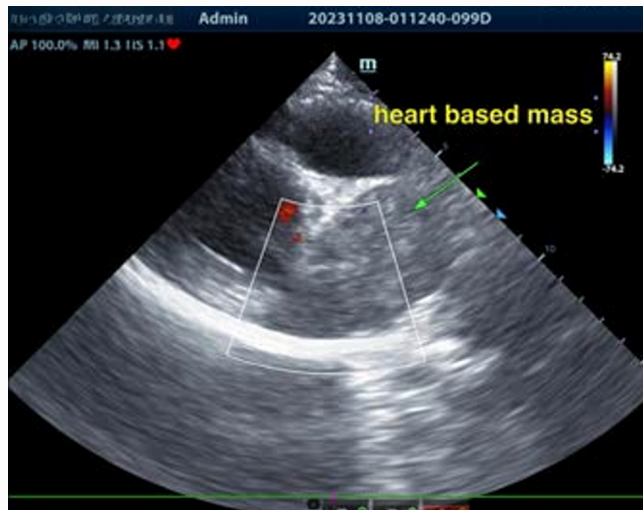
"If it's sick, it needs a probe."

Dr. Eric Lindquist, DVM, DABVP, Cert. IUVSS, founder and CEO SonoPath



Services:

- We work WITH you to help answer clinical questions through diagnostic ultrasound and fine needle aspirate sampling (FNA) if indicated.
- Our services include:
 - abdominal ultrasounds
 - echocardiograms
 - thoracic ultrasound
 - musculoskeletal
 - small parts or structures including masses, thyroid, and more
- It is a minimally invasive diagnostic tool with fast results!
 - STAT consultations can be submitted for urgent cases with reports returned in less than 6 hours
 - Routine consult reports are received within 24 hours.
- The Image Set is submitted to a specialist for interpretation and a detailed report WITH recommendations provided in the consultation.
 - For echocardiograms, we submit to Board Certified Veterinary Cardiologists.
- Fine Needle Aspirates can aid in diagnosis of many presentations of pathology (tumors, hepatopathy, infections). Allowing for a less invasive diagnostic technique in many cases (avoiding surgical biopsies).



Indications for Ultrasound

Common Indications for Ultrasound:

- Clinical Findings: heart murmur, arrhythmia, coughing, abdominal pain, abdominal distension, muffled heart sounds, tachypnea, hyporexia, anorexia, palpable abdominal mass, chronic or acute vomiting and/or diarrhea, shunt suspect, dyschezia, bloody stool, lymphadenopathy, jaundice, persistent estrus, prostatomegaly, vulvar discharge, pregnancy, behavior changes, cystitis, hematuria, stranguria, ADR of unknown origin and many more symptoms.
- Abnormal lab values: liver and/or biliary enzymes, bile acids, elevated bilirubin, anemia, abnormal white blood cell or platelet counts, azotemia, elevated SDMA, protein abnormalities, proteinuria, hematuria, abnormal urine values or cytology, abnormal pancreatic lipase, pro-BNP, and many more.
- Abnormal x-ray findings: organomegaly, masses, effusions, ascites, calculi, cardiac enlargement.
- Abnormal ECG



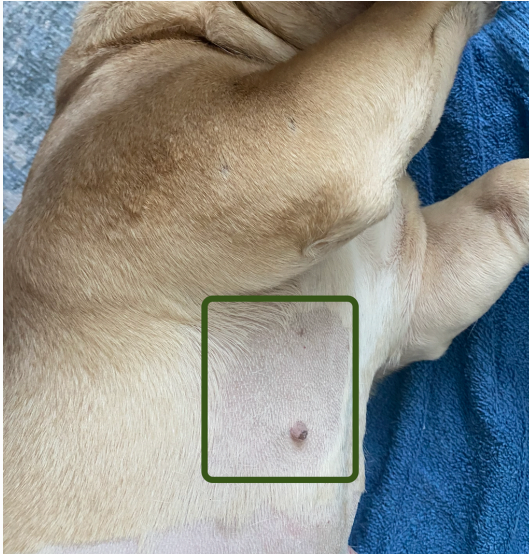
Preparing your patient for an ultrasound visit

- 1) Schedule an ultrasound visit and submit the patient information form.
- 2) Pet owner MUST complete the release for ultrasound, sedation and FNA form.
 - ****Patients should be fasted about 12 hours prior to their ultrasound, unless they are diabetic.****
- 3) Pre-hospital medication is highly recommended – Gabapentin and Trazodone, especially for nervous or agitated patients.
- 4) Shave the patient in the area being scanned prior to our arrival. This helps with speed and efficiency. See images below.
 - ***This is also a great test for the need for sedation. If the patient does not tolerate shaving, they likely will not tolerate an ultrasound without light sedation.***
 - For abdomen scans: Clip as if the pet is going to have a laparotomy
 - Laterally to the epaxial muscles, cranially to just cranial to the xiphoid and caudally to the pelvis. Intercostal views are a part of our imaging set, please be sure to clip the last 2-3 rib spaces as well.



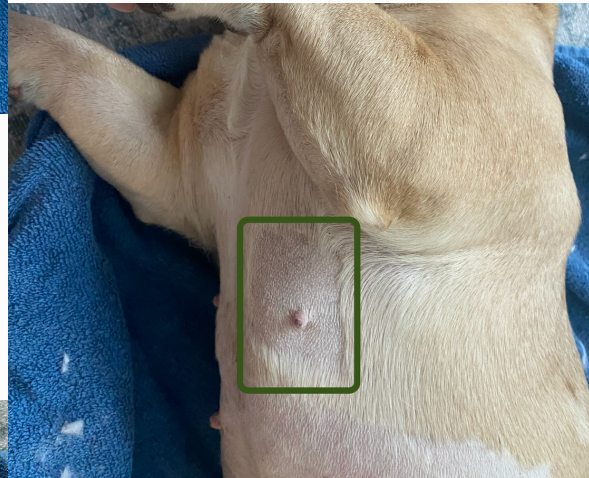
- 5) Brief technical assistance will be needed during the scan typically 10-20 minutes for restraint and positioning.
- 6) Receive your report the following business day for routine cases or less than 6 hours for STAT cases. This will be sent to the hospital's email address provided on the patient information form, unless otherwise indicated.

- For echocardiograms:
 - Clip a small region on the right ventral chest (ventral $\frac{1}{3}$ of the sternum start at rib space 3-7)
 - Clip small region on the left ventral chest (ventral $\frac{1}{3}$ of sternum starting approximately at the 4th to 7th rib space)
 - And clip a small area (about 3x3 inches just caudal to the xiphoid)



Right Parasternal site about 3rd to 8th rib space.

Left Parasternal site about 4th to 8th rib space.



Sub-Xiphoid site about 3-4 cm x 3-4 cm.

Sedation Protocols for Ultrasound

Canine Sedation:

- Pre-Visit:
 - Trazodone 4-10mg/kg PO 1-2 hours prior to arrival
 - Gabapentin 10-20mg/kg PO 2 hours prior to arrival (for even more thorough sedation, give an initial dose the evening prior to the appointment).
- Sedation (use at your discretion based on how calm and relaxed the patient is when being clipped for the scan):
 - Butorphanol 0.2-0.4mg/kg IV/IM (generally 0.3mg/kg for most patients)
 - Midazolam 0.25mg/kg IV/IM
 - Dexmedetomidine 0.007 mg/kg IM (*NOT for an echocardiogram*)
 - Acepromazine 0.01-0.05mg/kg IV/IM
- FNA Sampling:
 - Alfaxalone 1-4mg/kg IV to effect and maintenance OR
 - Propofol 1-4mg/kg IV to effect and maintenance

Feline Sedation:

- Pre-visit:
 - Gabapentin 50-100mg/cat (not per kg) 2-3 hours prior to arrival (for even more thorough sedation, give an initial dose the evening prior to the appointment).
- Sedation (use at your discretion based on how calm and relaxed the patient is when being clipped for the scan):
 - Butorphanol 0.2-0.4mg/kg IV/IM (generally 0.3mg/kg for most patients)
 - Midazolam 0.25mg/kg IV/IM
 - Dexmedetomidine 0.007mg/kg IM (*NOT for an echocardiogram*)
 - Acepromazine 0.01-0.05mg/kg IV/IM
- FNA Sampling:
 - Alfaxalone 1-4mg/kg IV to effect and maintenance OR
 - Propofol 1-4mg/kg IV to effect and maintenance

Schedule:

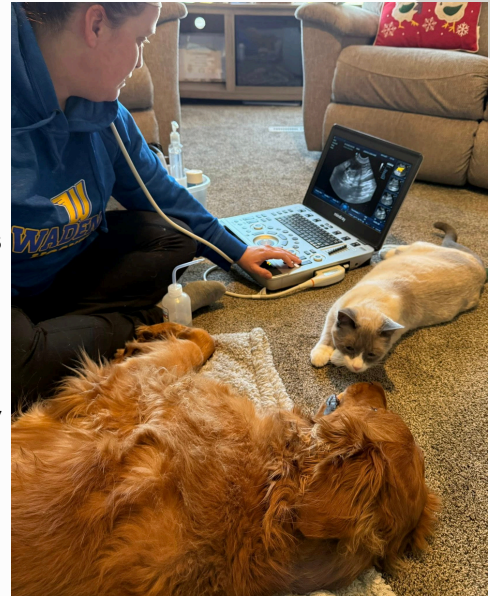
On the road:

- Weekly schedule varies, Monday – Friday by appointment.

Contact:

For Veterinarians or their staff, we can be reached directly as follows:

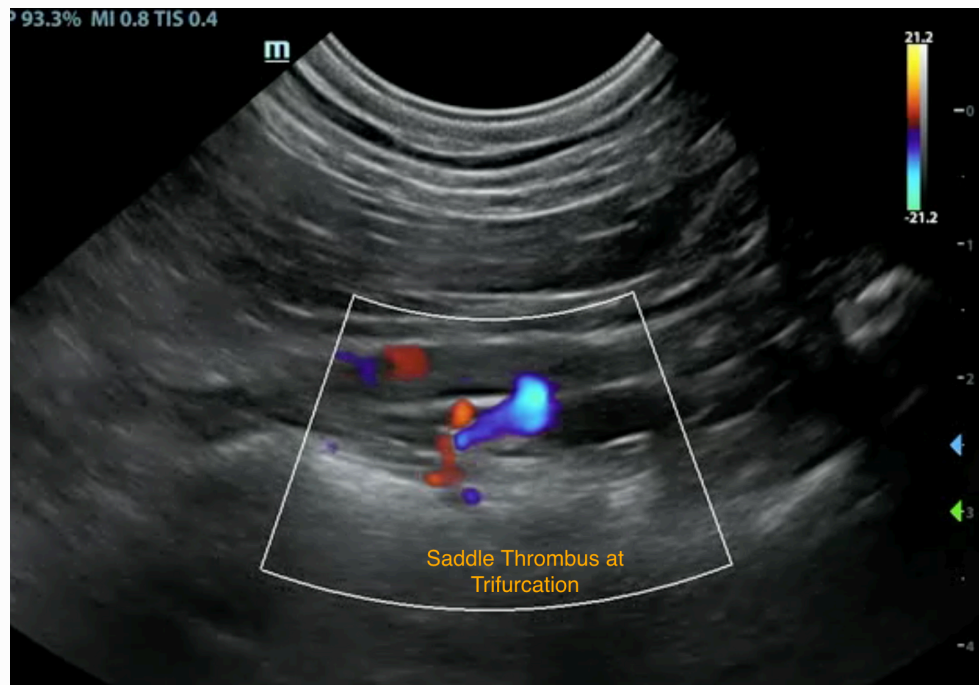
- Phone or Text: (218) 402-0627.
- Email: prairiesoundsmn@gmail.com
- We will return calls for requests or with questions typically between 8:30 am and 4 pm .



Requesting an Ultrasound:

Veterinarians or Veterinary Professional Staff: Please have the following forms completed:

- Patient Information Form – needed to schedule appointment: <https://forms.gle/iIBbpminwqo2kFJ66>
- Patient US Release Form – must be signed by the day of the appointment: <https://forms.gle/7pGov4tPikN2uNQv8>



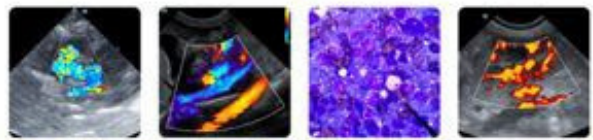


About the Sonographer:

Dr. Krell has transitioned into a mobile ultrasound practice after completing numerous hours of training, certifications, hundreds of ultrasound cases, and advanced lab work with ultrasound. As a graduate from the University of Missouri – Columbia College of Veterinary Medicine in 2012, she started work as both a mixed and small animal general practitioner. She worked 6 years in emergency medicine where the utility of ultrasound was quickly embraced. She implemented this diagnostic tool often in both ER and general practice. She continues to use the modality in her mobile ultrasound service practice and as a relief veterinarian.

In 2019, Dr. Krell started her sonographic training with SonoPath and since has completed certifications in both Abdominal and Echocardiogram Ultrasound (SDEP®). She became an instructor with SonoPath in 2025 aiding lab attendees in learning how to effectively and efficiently scan patients. She has also completed additional ultrasound abdominal training through labs at Viticus (Western Veterinary Conference). Dr. Krell is an active member of International Veterinary Ultrasound Society (IVUSS) following content, lectures, and updates in the sonography realm of veterinary medicine.

When not working, Dr. Krell spends time with her husband and three children. They have two dogs, five indoor cats, three outdoor cats and four horses. She is a lifelong fan of ice hockey and her hobbies include fishing, gardening, camping and learning how to drive a forecart with her Norwegian Fjord, Luna. Dr. Krell participates locally in her community as the Sebeka High School Fishing Team coach since 2023 and currently serves as a board member for the Heart O' Lakes Youth Fishing League since 2025. She has previously volunteered as a youth ice hockey coach, as a board member of the Wadena Hockey Club for two terms, and as a Girl Scout Leader from 2021-2025.



PATIENT

SPECIES

Canine

BREED

Bernadoodle

SEX

Neutered male

AGE

5 years

WEIGHT

64 lbs

INTERPRETED BY

Remo Lobetti, BVSc,
MMedVet (Med),
PhD, Dipl. ECVIM

IMAGING PERFORMED BY

Chrissy Krell, DVM

HOSPITAL NAME

REFERRING VET

INVOICE

DATE

3/20/24

PRESENTING CLINICAL SIGNS

History: Owner noted some coughing and lack of appetite for about 3 days. Groomer this week noted bruising on the belly and lumps on his neck and leg.

Abnormal PE/Chem/CBC/UA Results: PE: lymphadenopathy (generalized), diffuse SQ bruising on the ventral caudal abdomen 3/20/24: Thoracic rads: notable mediastinal mass 3/19/24 CBC: PLTs 91K, rest WNL. Plt Est: 52K-53K, (2-3/field) Chem: ALP 217 Coag.: PT - 14, PTT 78 4Dx: Ap + (has been previously). FNA lymph node aspirate cytology report (from SonoPath) diagnosis: Intermediate Cell Lymphoma

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is small with a normal thickness and smooth appearance of the wall. A small amount of hyperechoic, dependent sediment is noted.

Enlarged iliac lymph nodes measuring 2.1 x 4.6 cm with a rounded shape and increased echogenic appearance. Ureters not visualized, which can be considered a normal finding.

Normal renal size (left measures 5.7 cm and right measures 6.2 cm), architecture, echogenic appearance, cortico-medullary differentiation, which maintains a 1:3 cortex to medulla ratio, pelvis, and capsule. No infarcts, mineralization or renoliths evident.

The prostate is small and hypoechogenic.

Adrenal Glands

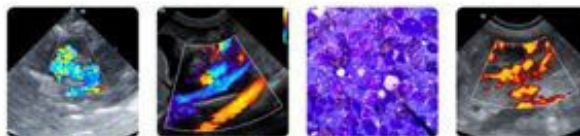
Normal shape, echogenic appearance, size, position, and appearance of the visible peri-adrenal vasculature. The left adrenal gland measures 2.5 cm in length x 0.52 cm and 0.5 cm in width. The right adrenal gland measures 2.39 cm in length x 0.36 cm and 0.6 cm in width. .

Spleen

The spleen is normal in size (2.4 cm in width) with a diffuse, mottled echogenic appearance and a regular curvilinear capsule. Normal volume of the splenic vasculature without any overt congestion or thrombosis evident.

Liver

Normal size, echogenic appearance, portal markings, and regular curvilinear capsule. No nodules or masses evident. Normal appearance of the hepatic and portal vasculature.



PATIENT

[REDACTED]

SPECIES

Canine

BREED

Bernadoodle

SEX

Neutered male

AGE

5 years

WEIGHT

64 lbs

INTERPRETED BY

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MMedVet (Med),
PhD, Dipl. ECVIM

IMAGING PERFORMED BY

Chrissy Krell, DVM

HOSPITAL NAME

[REDACTED]

REFERRING VET

[REDACTED]

INVOICE

[REDACTED]

DATE

3/20/24

Gallbladder

The gallbladder is small containing normal anechoic bile. Normal thickness and echogenic appearance of the wall. Normal size and appearance of the cystic and common bile duct.

Gastrointestinal

Normal appearance of the stomach, duodenum, small intestine, ileo-cecal junction, and colon with no loss of layering, 1:3 muscularis to mucosa ratio, normal wall thickness and peristaltic activity, and no distension of the lumen.

Pancreas

The visible sections of the pancreas are of normal size and echogenic appearance with a regular capsule. Normal echogenic appearance of the mesentery and fat surrounding the pancreas.

Free Abdomen

Normal mesenteric lymph nodes.

Enlarged gastric lymph node was noted and measured 1.1 x 2.0 cm in size with a rounded shape and hypoechogenic appearance.

No ascites evident.

Thorax

Normal appearance of the heart. No pericardial or pleural effusion evident.

ULTRASONOGRAPHIC FINDINGS

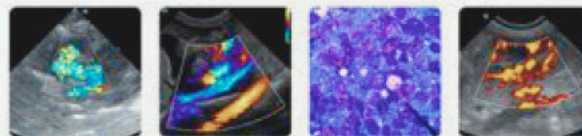
- Splenic pathology.
- Iliac and gastric lymphadenomegaly.
- Urinary bladder sediment.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The appearance of the spleen and enlarged gastric and iliac lymph nodes is compatible with the diagnosis of lymphoma.

The most likely etiology for the urinary bladder sediment would be incidental debris with differential diagnosis of hemorrhage and bacterial cystitis.

Therapy for the lymphoma would either be specific chemotherapy or palliative management.



PATIENT

[REDACTED]

SPECIES

Canine

BREED

Bernadoodle

SEX

Neutered male

AGE

5 years

WEIGHT

64 lbs

INTERPRETED BY

Remo Lobetti, BVSc,
MMedVet (Med),
PhD, Dipl. ECVIM

IMAGING PERFORMED BY

Chrissy Krell, DVM

HOSPITAL NAME

[REDACTED]

REFERRING VET

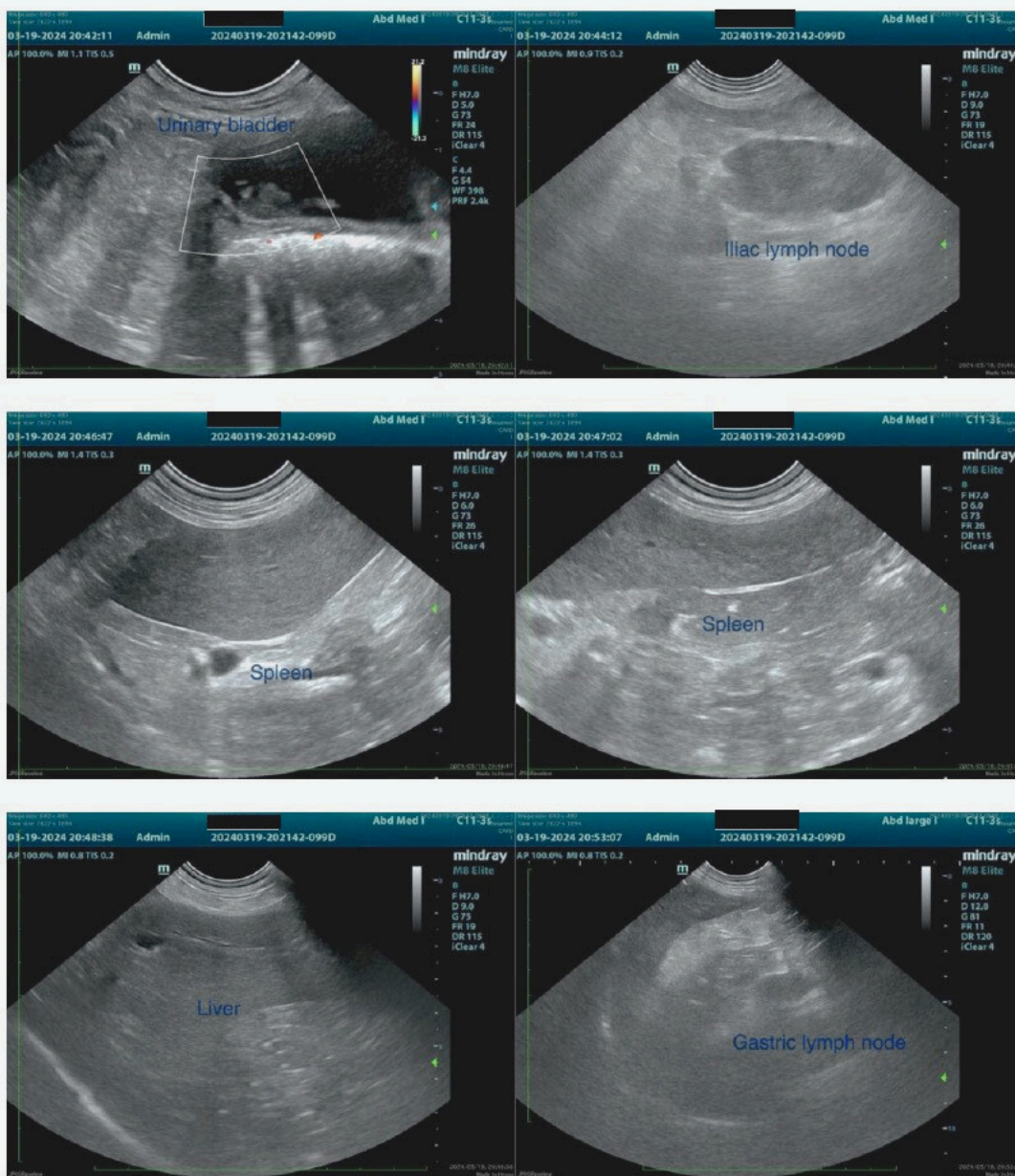
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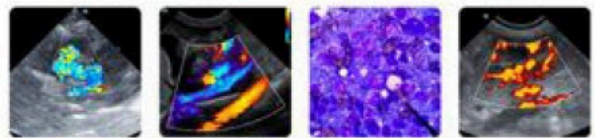
INVOICE

[REDACTED]

DATE

3/20/24





PATIENT

[REDACTED]

SPECIES

Canine

BREED

Bernadoodle

SEX

Neutered male

AGE

5 years

WEIGHT

64 lbs

INTERPRETED BY

Remo Lobetti, BVSc,
MMedVet (Med),
PhD, Dipl. ECVIM

IMAGING PERFORMED BY

Chrissy Krell, DVM

HOSPITAL NAME

[REDACTED]

REFERRING VET

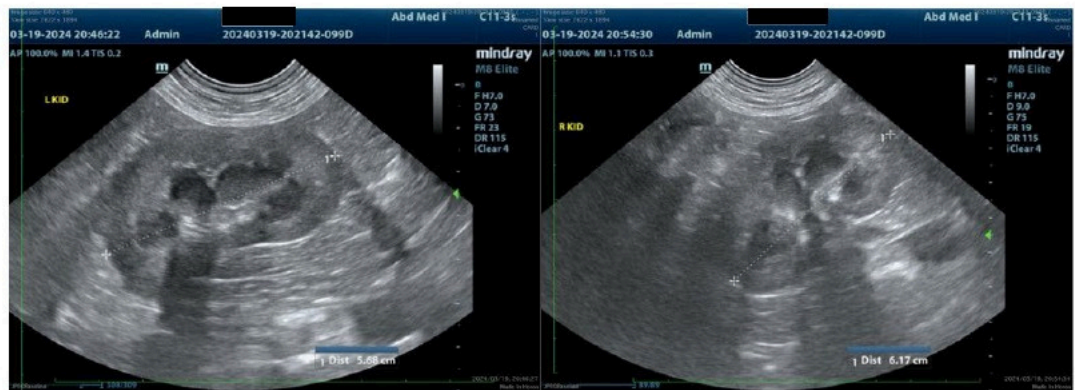
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INVOICE

[REDACTED]

DATE

3/20/24

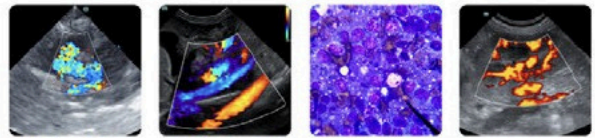


The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Remo Lobetti, BVSc, MMedVet (Med), PhD, Dipl. ECVIM (Internal Medicine)

info@sonopath.com



PATIENT



SPECIES Canine

BREED Bernadoodle

SEX Male neutered

AGE 5-year-old

WEIGHT 64 lbs

INTERPRETED BY Dr. Lawrence McGill, DVM,Ph.D.,Diplomate, ACVP

IMAGING PERFORMED BY Chrissy Krell, DVM

HOSPITAL NAME



REFERRING VET



DATE 3/19/2024

PRESENTING CLINICAL SIGNS: Owner noted some coughing and lack of appetite for about 3 days. Groomer this week noted bruising on the belly and lumps on his neck and leg. PE: lymphadenopathy (generalized), diffuse SQ bruising on the ventral caudal abdomen CBC: PLTs 91K, rest WNL. Chem: ALP 217 Coag.: PT - 14, PTT 78 4Dx: Ap + (has been previously)

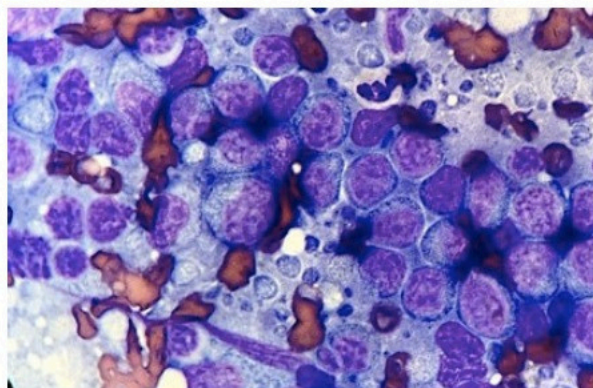
CYTOLOGY SUBMISSION: FNA of lymph node.

OBSERVATIONS: Lymph node: Submitted are 5 videos with two excellent videos of cells collected from the lymph node in Bernie. Two of the collections are smudge cells that are uninterpretable. The other three videos have good collections of lymphoid cells although one of the videos consisted of cells that were not well stained. Two excellent videos are submitted of excellent collections of cells from the lymph node in this aspiration. The lymphoid cells, where identified, consist of lymphoid cells that have prominent cytoplasm and irregular nuclei. The nuclei are varied but many have an intermediate cell size. Mitotic figures were identified in several fields in the excellent videos.

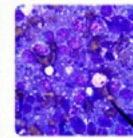
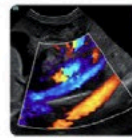
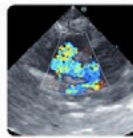
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS: Lymph node - Good uniform cellular collections suggesting intermediate cell lymphoma.

COMMENTS: The cellularity suggests intermediate cell lymphoma. It is not a high-grade lymphoma. This cellularity includes increased numbers of mitotic figures and a rather uniform cellularity where nuclei are 2 to 4 times the size of red blood cells in many fields. There are scattered neutrophils in the collection suggesting some inflammation. If chemotherapy is contemplated, then immunophenotyping of the cells to confirm the specific cell type may be beneficial for prognosis. The slides may be submitted for PARR testing or new slides that are not stained can be submitted for immunocytochemistry staining. Flow cytometry can be beneficial but will require a repeat collection of cells prior to submission to the laboratory. Contacting the laboratory to confirm how to submit flow cytometry samples is encouraged. The cellularity is suggestive of lymphoma causing me to be concerned about the potential in Bernie and thus a guarded to unfavorable prognosis is warranted but further testing is encouraged.

Lymph node - The image below demonstrates a field of cells that suggest the potential of an intermediate cell lymphoma with a mitotic figure down in the lower right field of these cells collected from Bernie. This cellularity was not the most prominent cellularity in other fields, but it is certainly present in a large number of fields.



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PATIENT

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.

SPECIES Canine

L.D. McGill, DVM, Ph.D., DACVP

8288 Top of the World Drive

BREED Bernadoodle

Cottonwood Heights, UT 84121

ldmcgill.vetpath@gmail.com

cell: 801-865-1220

SEX Male neutered

AGE

5-year-old

WEIGHT

64 lbs

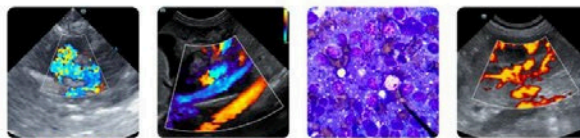
INTERPRETED BY
Dr. Lawrence McGill,
DVM, Ph.D., Diplomate,
ACVP

IMAGING
PERFORMED BY
Chrissy Krell, DVM

HOSPITAL NAME

REFERRING VET

DATE
3/19/2024



PATIENT

██████████

SPECIES

Feline

BREED

DSH

SEX

Male Neutered

AGE

8 years

WEIGHT

9.5lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING

PERFORMED BY

Chrissy Krell, DVM

HOSPITAL NAME

██████████

██████████

REFERRING VET

██████████

INVOICE

██████████

DATE

2/17/26

PRESENTING CLINICAL SIGNS

History: Presented 2/11 for increased RR: 50bpm and vomited twice. Presented to emergency hospital and diagnosed with hyperthyroidism, enlarged heart on CXR and possible pancreatitis.

-Abnormal PE/Chem/CBC/UA Results: PE: increased resp. rate (50bpm) with mild abdominal effort and tenderness on abdominal palpation 2/11- SPO2 95% 2/11. CXR: normal cardiac silhouette with mild to mod. interstitial pattern all lung fields, gas filled distal colon, spondylosis T11-T13. 2/12: BNP: 1482, T4 10.7.

ECHOCARDIOGRAM FINDINGS

2D,m-mode, color flow and doppler imaging is available. The left ventricular wall is borderline in dimension with no hypertrophy seen. The LV chamber is normal with adequate function. There is a diffusely hyperechoic endocardium consistent with fibrosis. The papillary muscles are mildly remodeled and hyperechoic. The endocardium also appears remodeled. The left atrium is mild to moderately dilated. The right atrium is mild to moderately dilated. The right ventricle appears normal. The mitral valve is normal in structure and mobility. Trace MR. Blood flow through both the LVOT and RVOT is normal in velocity. No TR. No AI. No pericardial or pleural effusion seen. No obvious cardiac tumors.

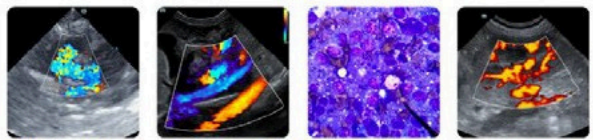
CARDIAC CHART

FELINE CARDIAC PARAMETERS	BODY WEIGHT (kg)	HR (BPM)	IVSd (cm) (Moise, Pipers)	LVIDd (cm) (Moise, Pipers)	LVWd (cm) (Moise, Pipers)	FS (%)	EF (%)
NORMAL PARAMETER	-----	150-240	0.35-0.55	<2 (mean 1.5)	3.5-0.55	35-67	80-100
PATIENT	4.3	NM	0.55	1.2	0.55	42	80
FELINE CARDIAC PARAMETERS	LA/AO (Boon)	LA/AO HEART BASE (Swe) (Abbott)	LA 2Dshort axis Baseview (cm) (Abbott)		LVOT VEL (m/s)	RVOT VEL (m/s)	E _{max} (m/s)
NORMAL	<1.5	<1.3	<1.2		<1.6	<1.3	<0.9
PATIENT	NM	1.7	1.6		1.2	0.8	NM
<i>*Note: All measurements based upon multi-modal images and methods. An average value is reported.</i>							
Adapted from June Boon, Veterinary Echocardiography,1998							
Abbott J & MacLean H JVIM 2006;20: 111-119, Moise et al. Am J Vet Res 47:1476, 1986. Pipers et al. Am J Vet Res 40:882, 1979.							

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The finding of biatrial dilation in the face of borderline LV wall thickness is most consistent with Unclassified Cardiomyopathy (UCM); however, end-stage or burnout HCM, tachycardia-induced cardiomyopathy or some prior infectious or inflammatory insult to the myocardium cannot be definitively ruled out. There is only borderline hypertrophy noted today, ruling out typical hypertrophic disease. No additional issues are identified.

The patient is reportedly hyperthyroid, and the resultant tachycardia is likely contributing to the echo findings. Based upon mild to moderate biatrial dilation and a lack of CHF on the CXR, CHF



PATIENT

[REDACTED]

SPECIES

Feline

BREED

DSH

SEX

Male Neutered

AGE

8 years

WEIGHT

9.5lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Chrissy Krell, DVM

HOSPITAL NAME

[REDACTED]

[REDACTED]

REFERRING VET

[REDACTED]

INVOICE

[REDACTED]

DATE

2/17/26

is unlikely. That being said, there is some risk for complication in this case if the tachycardia persists. Assuming the thyroid can be controlled in the near future, Atenolol is likely unnecessary. Plavix is warranted, at least for the short-term, due to atrial enlargement. A BP should certainly be obtained in this complicated case.

Going forward, there is risk for recurrent CHF, development of additional blood clots, and/or malignant arrhythmias/sudden death in the future. Monitoring of sleeping breathing rates at home is recommended as the best way to screen for recurrent/impending CHF at home.

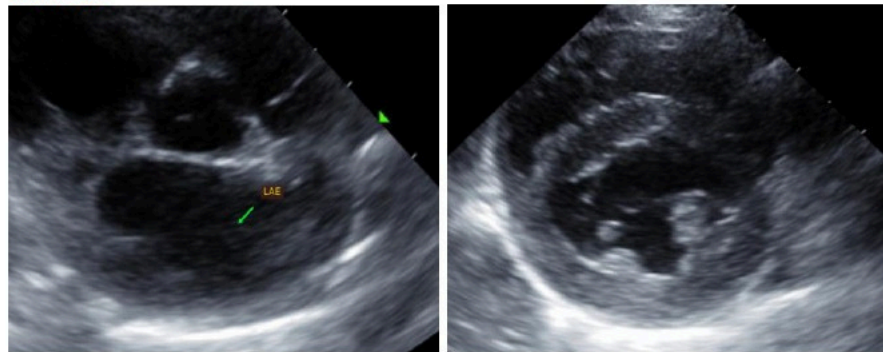
Monitor at home for any progressive labored breathing and/or signs of clot recurrence (limb paralysis, neurologic changes, etc.).

PLAN

If there are issues controlling the thyroid and the patient remains tachycardic, consider Atenolol to bridge the gap with a target heart rate of 140-160bpm in hospital. Institute Plavix 75mg tabs; Give ¼ tab by mouth every 24 hours (NOTE: bitter along cut edge, may cause foaming at the mouth; coat in entirety). Immediate thyroid control should be obtained.

Recheck echocardiogram in 6 months once stable on oral medications to assess for progression/regression and need for continued medications.

IMAGES



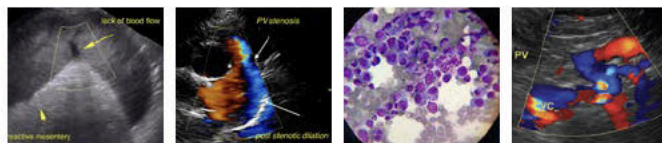
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Thank you for this referral. This report was generated using transcription software, and minor dictation errors may be present. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance, please contact me.

Maggie Machen Lamy, DVM

Diplomate of the American College of Veterinary Internal Medicine (Cardiology)

info@sonopath.com



PATIENT

[REDACTED]

SPECIES

Canine

BREED

Corgi

SEX

Neutered Male

AGE

7 Years

WEIGHT

39 Pounds

INTERPRETED BY

Eric Lindquist, DMV

DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Dr. Chrissy Krell

HOSPITAL NAME

[REDACTED]

REFERRING VET

[REDACTED]

INVOICE

[REDACTED]

DATE

1/5/23

PRESENTING CLINICAL SIGNS

Noted changes end of October, some coughing and then snoring. Protruding anal tissue developed later, no issues passing stool. Over Christmas he began coughing more, producing mucous. This progressed to some frank blood. Still eating normal, no other concerns. Patient tested for a number of things, found increased abdominal and peripheral lymph nodes, Anaplasmosis + on 4Dx, increased WBCs on CBC with a UTI and struvite crystalluria. Started Enrofloxacin and doxycycline. Owner reported this week the coughing has improved, not eating, did vomit - advised to d/c the doxycycline.

Abnormal PE/Chem/CBC/UA Results: PE: peripheral lymphadenopathy, tartar and gingivitis - noted 3 small sores/masses? in the mouth and on the palate by 108. Small rectal prolapse (improved bloody discharge but still very thickened). Noted red rash on the abdomen and thorax during clipping for US 12/28 CBC: WBC 27.17K, Neut 18.65K, L 5.74K, Mono 2.4K Chem: SDMA 17 Pt/PTT - normal 4Dx - Ap + IDEXX Tick PCR - negative UA: bacteriuria, hematuria and pyuria (free cath), struvite crystalluria, non-squams 1-2/hpf, protein 30 mg/dL Urine Culture: Staph. pseudintermediis 50-100K, susceptible to Enro (and lots of others). FNA of peripheral lymph nodes: Lymphoid hyperplasia PARR pending. 1/5/22 Blastomycosis (Miravista) pending CBC: WBC 19.27K, Lym 5.38K, Mono 1.65K Manual cytology: pending Recheck UA: neg bacteria, neg crystals, RBC and WBC

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 2.0 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. The capsules were acceptably uniform without significant irregularities. The right kidney measured 6.6 cm. The left kidney measured 5.65 cm with slight pyelectasia noted.

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. The left adrenal gland measured 2.03 cm x 0.58 cm at the cranial pole and 0.63 cm at the caudal pole. The right adrenal gland measured 2.46 cm x 0.47 cm at the cranial pole and 0.67 cm at the caudal pole.

Spleen

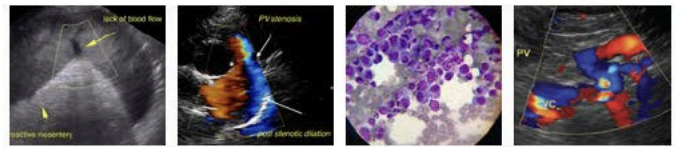
The **spleen** was enlarged with reticular pattern and swollen contour. Hypoechoic parenchyma.

Liver

The **liver** was swollen, irregular in contour. Hepatic lymph nodes were enlarged and rounded up to 2.0 cm. 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



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demonstrated normal luminal chyme and stool consistency respectively. No obstructive or overt infiltrative disease was noted. No associated abnormal lymphatic activity was noted.

Pancreas

SPECIES

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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.

BREED

Corgi

Free Abdomen

Iliac lymph nodes were mildly enlarged, hypoechoic, rounded and irregular. FNA indicated. The largest node measured 1.5 cm x 1.0 cm.

SEX

Neutered Male

The mesenteric and cranial abdominal **lymph nodes** presented abnormal length to width ratio with distorted, swollen, irregular contour. Parenchymal detail was indiscernible. This is most consistent with lymphoproliferative disease such as lymphoma/round cell neoplasia, metastatic disease, or an aggressive inflammatory process. FNA, cytology and culture are warranted.

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Reactive mesentery noted in the cranial abdomen associated with the lymphadenopathy.

ULTRASONOGRAPHIC FINDINGS

- Multifocal infiltrative pattern involving iliac lymph nodes, spleen, liver, multiple cranial abdominal lymph nodes – round cell neoplasia/lymphoma likely.

WEIGHT

39 Pounds

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

FNA of the accessible lymph nodes, spleen and liver indicated to confirm. Immediate chemotherapeutic intervention recommended. Chest radiographs warranted to assess for metastasis/comorbidity.

INTERPRETED BY

Eric Lindquist, DMV

DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Dr. Chrissy Krell

HOSPITAL NAME

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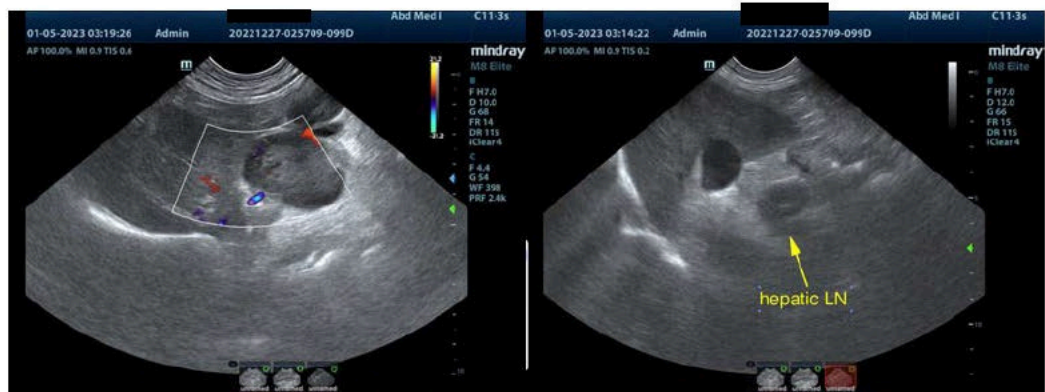
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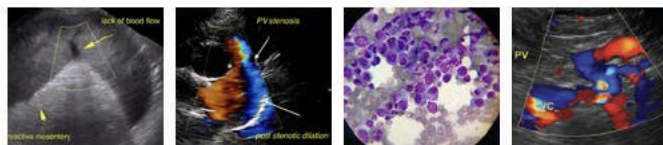
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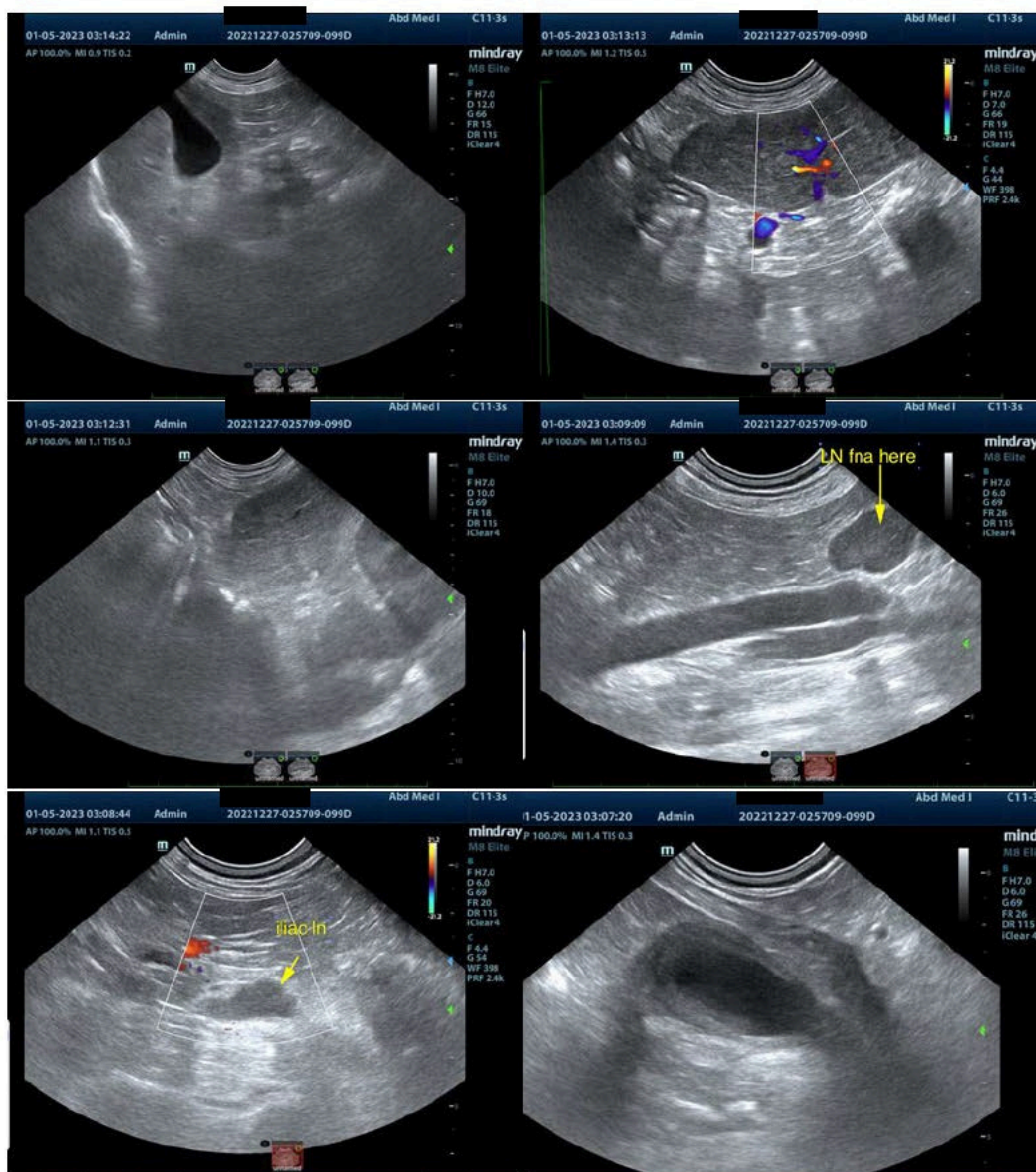
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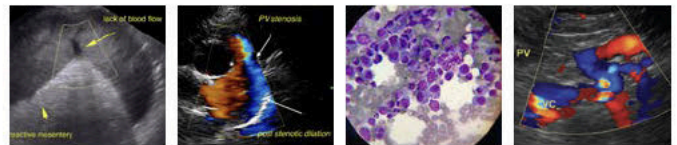
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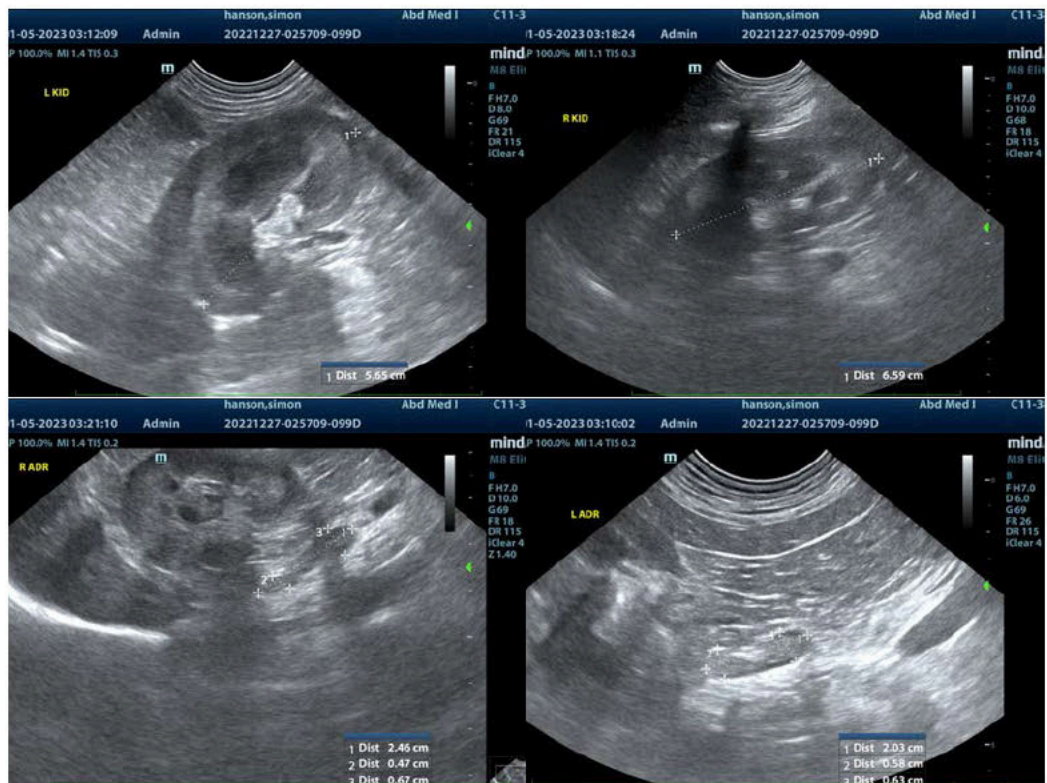
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info@SonoPath.com

MOBILE ULTRASOUND



For Pets in Minnesota
&
North Dakota!