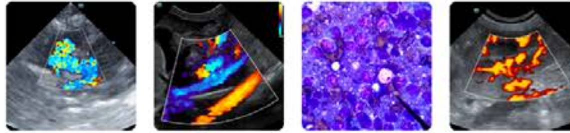




**DATE**
4/9/26

**PATIENT**
Darling Cardenas-Coronel

**SPECIES**
Canine

**BREED**
Pomeranian

**SEX**
Intact Female

**AGE**
2/18/21

**WEIGHT**
4.9 kg

**INTERPRETED BY**
Eric Lindquist, DMV, DABVP, Cert. IVUSS

**HOSPITAL NAME**
Northwind Animal Hospital

**REFERRING VET**
Dr. Pommett

**INVOICE**
74332

## PRESENTING CLINICAL SIGNS

**Patient History:** Ongoing pleural effusion since 2/19. Recent CT scan showed uncertain cause of pleural effusion, but R heart failure should be considered as well as a neoplastic process that cannot be seen on CT (ie carcinomatosis). Patient came in on 3/27 for thoracocentesis. On TFAST, a mass was noted in close proximity to the heart. Concern for heart base tumor. Thoracocentesis was not performed, as there was a minimal amount of fluid and owners would like to wait for ultrasound. No murmur is present.

**Current Medications:** Furosemide 20 mg - 1/2 tab BID - potentially discontinuing pending on recheck exam 3/27

**Labwork Results:** Not attached, reported as: CBC/Chem 2/27- WBC - 18.8 k/ul, Neutrophils - 15303 /ul, monocytes - 1899 /ul, albumin - 2.2 g/dl. CBC/chem 3/16- lymphocytes 0.69 k/ul, ALP 154 U/L
CT results 3/19: The cause for the pleural effusion is uncertain, but right heart failure should be considered and further investigation of cardiac morphology and function is advised. There is no evidence of a lung lobe torsion, most lungs are severely compressed by the surrounding effusion, the right cranial lung lobe is still well aerated. Septate and contrast enhancing pleural effusion, suggests extravasation of contrast through seepage from a vessel.

**Date of Previous IntraPet Ultrasound:** No previous.
**Sedation:** Dexdomitor/Torbugesic then Alfax for FNA.
**Stat Report:** Declined at this time.
**Imaging Performed by:** Stephanie warga RDCS, RVT.

## 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 left kidney revealed dystrophic changes, cortical infarcts and mineralization, measuring 3.68 cm.

The right kidney presented normal size and contour with slight pinpoint mineralizations, measuring 3.88 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. Right measured 1.73 cm x 0.40 cm at the caudal pole and 0.44 cm at the cranial pole. Left measured 2.05 cm x 0.45 cm at the caudal pole and 0.36 cm at the cranial pole.

### *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*

The **pancreas** was prominent and mildly irregular, slightly hypoechoic in the left limb. The right limb was hypoechoic and irregular with undulating contour.

### *Other*

The uterus was empty at 0.35 cm. The left ovary was slightly irregular with areas of mineralization, measuring 0.80 cm. The right ovary measured 1.08 cm.

Comet tail lung pattern noted through the diaphragm.

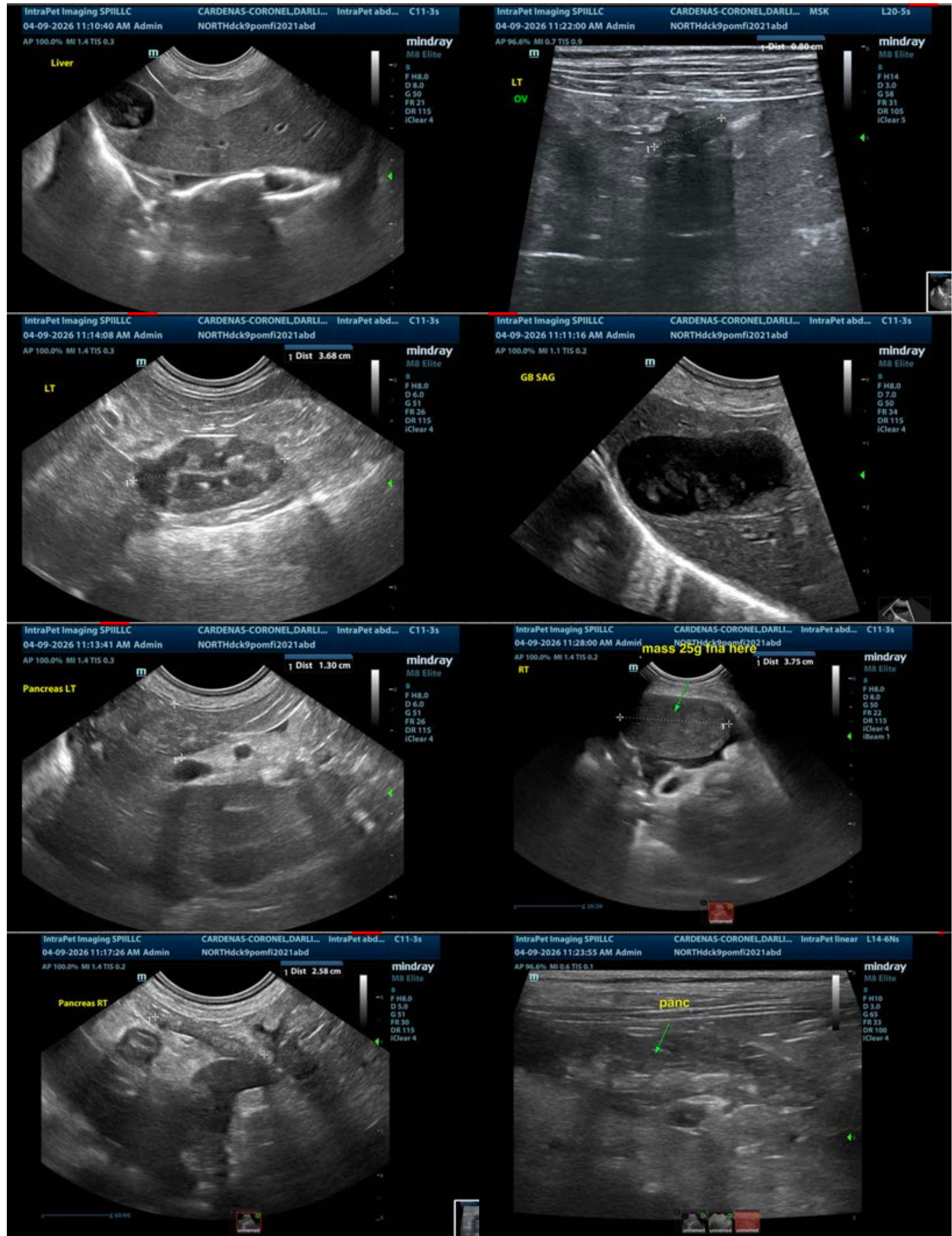
The right thorax revealed a hypoechoic mass measuring 3.75 cm with surrounding pleural effusion.

## ULTRASONOGRAPHIC FINDINGS

- Dystrophic left kidney with infarcts and mineralization.
- Minor degenerative right renal changes with mineralization.
- Prominent, slightly irregular pancreas – Chronic active pancreatitis, remodeling, or potential underlying carcinoma are all possibilities in this patient.
- Slightly irregular left ovary with areas of mineralization – This may be an idiopathic finding, however I cannot rule out emerging ovarian carcinoma.
- Right thoracic mass – appears to be of lung origin, given the air accumulation in the peripheral part of the lung lesion.

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

FNA of the thoracic mass was performed. Recommend focusing on the thorax with pleurocentesis if not already performed and immediate cytospin to assess for exfoliating cells, as well as ultrasound guided FNA of the left ovary and pancreas to ensure a primary neoplastic process is not present in the abdomen. Recommend matching abdominal findings with lung mass cytology.



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mindray
M8 Elite
Liver
F H8.0
D 8.0
G 50
FR 21
DR 115
iClear 4
IntraPet Imaging SPIILLC
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GB SAG
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M8 Elite
Pancreas LT
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D 6.0
G 51
FR 26
DR 115
iClear 4
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mass 25g fna here
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mindray
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RT
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D 8.0
G 50
FR 22
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iBeam 1
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mindray
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Pancreas RT
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FR 30
DR 115
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panc
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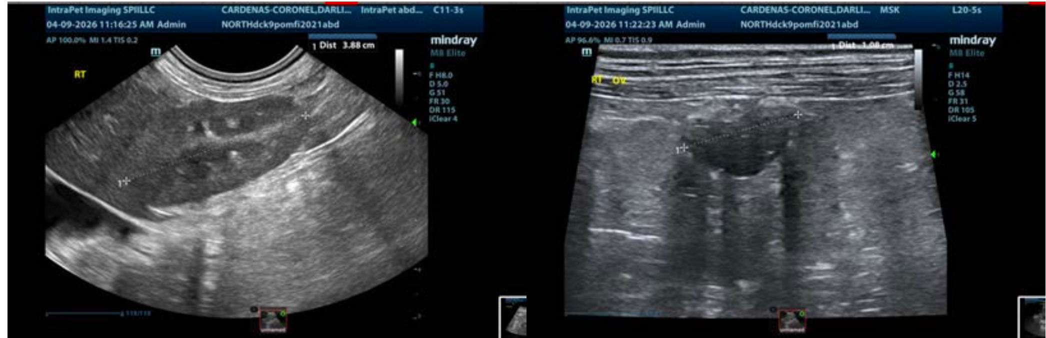
G 65
FR 33
DR 100
iClear 4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C11-3s
mindray
M8 Elite
RT
1 Dist 3.88 cm
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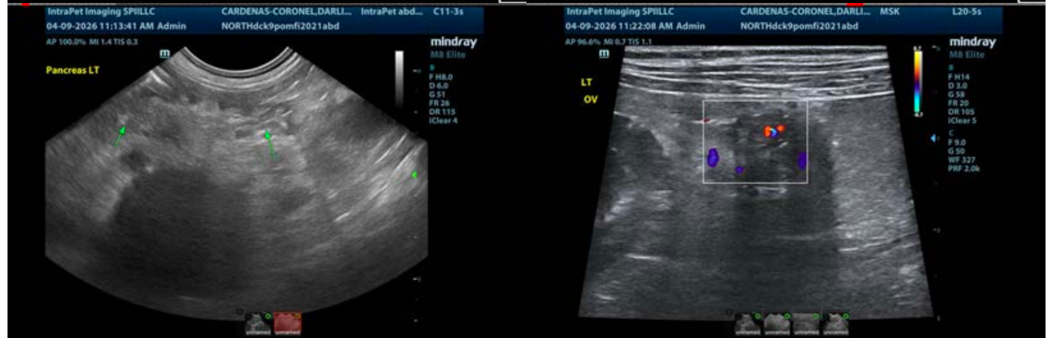
RT OV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Pancreas LT
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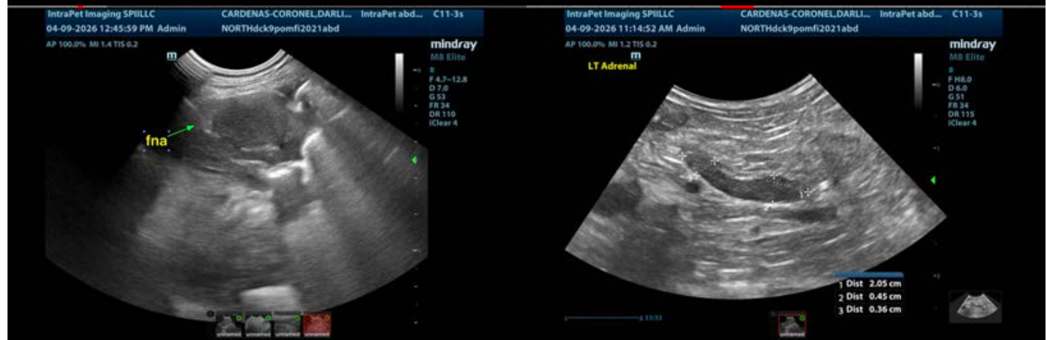
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C11-3s
mindray
M8 Elite
fna
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NORTHdck9pomfi2021abd
IntraPet abd...
C11-3s
mindray
M8 Elite
LT Adrenal
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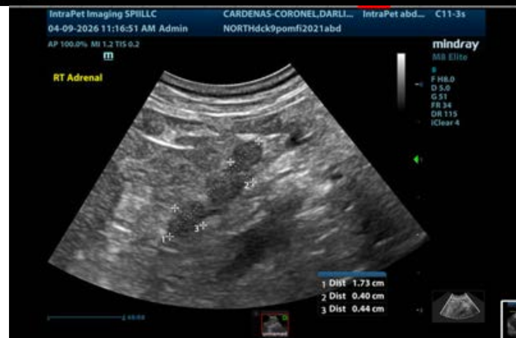
2 Dist 0.45 cm
3 Dist 0.36 cm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IntraPet abd...
C11-3s
mindray
M8 Elite
RT Adrenal
1 Dist 1.73 cm
2 Dist 0.40 cm
3 Dist 0.44 cm

**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(CFM), Cert. IVUSS,
CEO, Owner, Founder -- SonoPath.com
info@SonoPath.com