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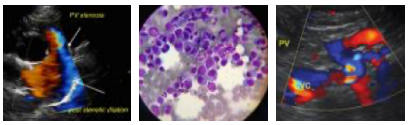

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DATE
12/7/21

PATIENT
Charlie Windle

SPECIES
Canine

BREED
Cavalier King Charles spaniel

SEX
Male, neutered

AGE
12/3/2016

WEIGHT
19 lbs.

INTERPRETED BY
Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)

IMAGING PERFORMED BY
Rachel Brilhart RDMS

HOSPITAL NAME
Animal Emergency Hospital

REFERRING VET
Dr. Roper

INVOICE
12678

PRESENTING CLINICAL SIGNS

Recheck AUS.
History: Presenting Complaint: Referral; Not Eating; Vomiting. Date: 12-03-2021 Notes: P is a referral for not eating diarrhea. P got an ultrasound done in September which showed: The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely. The bowel changes could be consistent with an inflammatory process or normal variation. The mild peritonitis is thought to be secondary to bowel inflammation. Incidental Biliary stones BW: Albumin:1.5 Ca:6.9 Glob: 2.2 Low cholesterol WBC: 46,000 Neutrophilia Radiographs: Thickened bowel loops. Assessment: IBD vs PLN vs PLE. Plan: Recommend to Owner Hospitalization, IV catheter, fluid therapy, hetastarch, b vits, albumin q24, urinalysis, and further treatment as needed.

Current Medications: Clavamox, Gabapentin, Cerenia, Metronidazole, Entyce, Fenbendazole, Unasyn, Buprenex.
Lab Results: USG 1.022 with trace proteinuria, mild anemia, panhypoproteinemia.
Date of Previous IntraPet Ultrasound: 9/14/21.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

The prostate is normal in size (0.83 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

The left kidney is normal size (4.86 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal size (4.21 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal size (0.51 cm at cranial pole) (0.60 cm at caudal pole) (1.84 cm in length); normal shape; 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 size (0.57 cm at cranial pole) (0.56 cm at caudal pole) (2.06 cm in length); normal shape; 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 normal in size (1.03 cm in width at the level of the hilus) 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 contours and structure. There is appropriate echogenicity and echotexture. No overt structural evidence of inflammatory, infiltrative or regenerative pathology is evident. A few small intrahepatic biliary stones are visualized. Vascular is of normal volume with no evidence of congestion. No pathological hepatic lymphadenopathy observed. The gall bladder lumen is moderately distended. The wall is thin and smooth. A small to moderate amount of aggregated echogenic gravity-dependent debris/sludge is observed within the lumen. The cystic and common bile ducts are normal/not seen.

Gastrointestinal
The gastric lumen is severely fluid distended and hypomotile. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The mesentery effacing the serosal surface of the stomach is hyperechoic. The pyloric outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall is normal to mildly thickened (up to 0.40 cm) with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The ileocecal colic junction and colonic wall are normal. No obstructive disease is noted.

Pancreas
A portion of the pancreas is obscured by the gastric distention. In the visualized portion (right limb) the parenchyma is largely hyperechoic relative to surrounding omental fat and mottled in appearance. No distinct focal lesions are observed. The pancreatic duct is visible but not overtly dilated.

Free Abdomen
There is no evidence of free fluid. A few prominent mesenteric lymph nodes are visualized, the largest measuring 1.96 cm in length.

ULTRASONOGRAPHIC FINDINGS
Primary Findings:

- Severe gastric ileus. Regional peritonitis is present, likely secondary to gastric pathology.
- The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

Secondary Findings:

- Age-related pancreatic remodeling/fibrosis. Concurrent inflammation may be present, particularly if the patient is painful on cranial abdominal palpation.
- Intrahepatic biliary stones- incidental, previously observed.

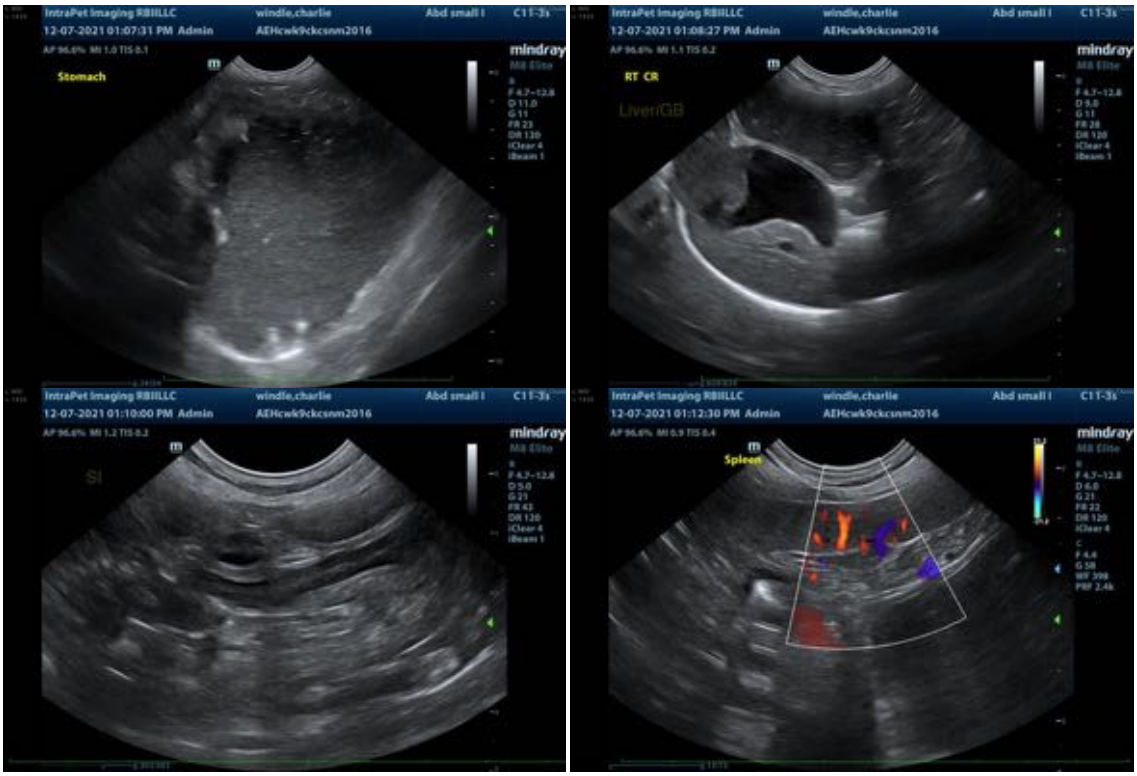
*Based on the patient's clinical history, a protein losing enteropathy (i.e., inflammatory bowel disease, lymphangiectasia, infectious/parasitic disease, emerging neoplasia is suspected.

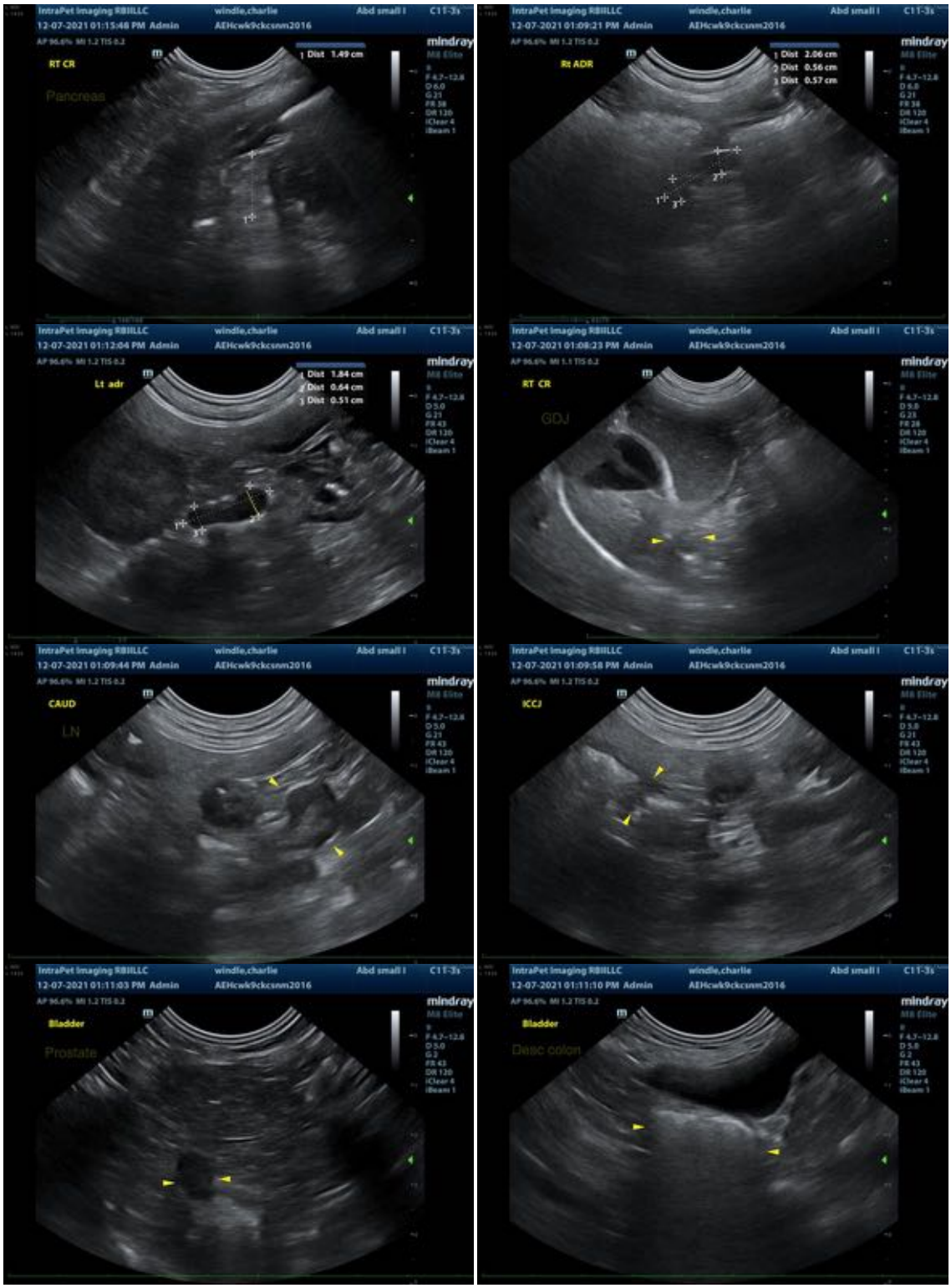
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Consider a promotility agent (i.e., Metoclopramide) to address the gastric ileus.

- A fecal evaluation for ova/Giardia
- Prophylactic deworming with Fenbendazole at 50 mg/kg once a day for 5 days is recommended. Repeat above protocol in 3 weeks.
- A low fat, hypoallergenic diet trial is recommended.
- Ultimately, endoscopic or surgical gastrointestinal biopsies may be necessary to get a definitive diagnosis. Surgical biopsies are more likely to yield a definitive diagnosis. However, there is more risk of dehiscence given the patient's hypoalbuminemic state. Three-view thoracic radiographs should be performed prior to anesthesia to assess cardiopulmonary status, as hypoalbuminemia can result in third spacing of fluids.
- To further evaluate for concurrent causes of hypoalbuminemia, consider the following:

    1. UPC
    2. Pre- and post-prandial serum bile acids
    3. A resting cortisol level to screen for hypoadrenocorticism. If resting cortisol level is < 2.0 mcg/dL, an ACTH stimulation test is recommended





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.

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