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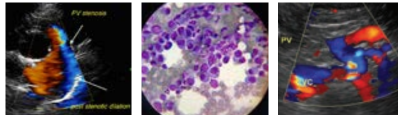

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DATE
10/5/21

PATIENT
Basil Sandlock

SPECIES
Canine

BREED
Yorkie

SEX
Neutered Male

AGE
2009

WEIGHT
6 lb 8 oz

INTERPRETED BY
Kathleen Sennello DVM, MS, Diplomate ACVIM (Small Animal Internal Medicine)

HOSPITAL NAME
Chadwell AH

REFERRING VET
Dr. Haskin

INVOICE
26057

PRESENTING CLINICAL SIGNS

Longstanding history of tracheal collapse. Alternates between tussigon and torb for cough suppression. History of heart disease, on Vetmedin and Lasix. History of allergies, receives Cytopoint injections. Recently, weight loss and increases senility behaviors. Not eating as well as normal.
Current Medications: Lasix, Vetmedin, Tussigon, Torb just added Clavamox and Denamarin.
Lab Results: liver values all very elevated compared to previous.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not needed.
Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System
The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, or masses. There are several groupings of shadowing mineralization in the dependent portion of the urinary bladder. These areas are 0.3-0.4 cm and most consistent with small shadowing stones, although groupings of sandy debris are possible. Correlate findings with radiographs. Recommend urinalysis and culture.

The prostate is normal in size (0.7 cm) and shape for this neutered male dog. The parenchyma is homogenous and the external margins are smooth. The prostatic urethra appears normal with no evidence of irregularity, invasion, mass effect or calculi.

The left kidney has a normal shape and size. Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. Prominent, non-obstructive nephroliths were noted at 3.6 cm. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (3.6 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. Non-obstructive nephroliths are present measuring 0.43 and 0.62 cm. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands
The left adrenal gland is normal in size measuring 0.46 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

The right adrenal gland is normal in size measuring 0.55 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

Spleen
The spleen is subjectively normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

Liver
The liver is normal/small in size, and normal in echogenicity with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

The gall bladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. There is a moderate amount of non-organized echogenic debris. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach is moderately dilated with fluid and irregular shadowing material most consistent with normal ingesta and gas. It measures at a normal thickness of <0.7cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layering is adequate and there is no impression of reduced peristaltic activity. Per history, patient has been fasted. Some of the shadowing debris cannot be differentiated from the possibility of mild mucosal mineralization or even an irregular thickened wall. Color flow in these areas does not demonstrate clear blood flow, but a mucosal irregularity thickening is possible.

The visualized areas of duodenum, jejunum and ileum have a uniform diameter with minimal fluid distension. Wall appears subjectively, mildly increased. Bowel loops follow a typical curvilinear path with distinct wall layering. Duodenum wall measured 0.4 cm. Jejunum wall measured 0.28 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

Pancreas

The pancreas is normal and isoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

Free Abdomen

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

PRIMARY FINDINGS

- Moderate shadowing material in stomach and possible mucosal irregularity/thickening – this is a soft finding, but given the fast prior to imaging, this area appears abnormal.

- Dependent mineralization in the urinary bladder – most consistent with small stones/sandy debris. Recommend urinalysis and culture and radiographs to better delineate number and size.

- Borderline small, heterogeneous liver – The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy. Colonic shadowing and patient movement precludes full evaluation of the portal vein to assess for the possibility of a shunt (would need more sedation).

- Decreased corticomedullary distinction in both kidneys with non-obstructive nephroliths – Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis. The hyperechoic mineralized foci observed at the corticomedullary junction of the left/right kidney are consistent with small, non-obstructive nephroliths.

SECODNARY FINDINGS

- Moderate gallbladder debris – The significance of the aggregated gallbladder sludge is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting.

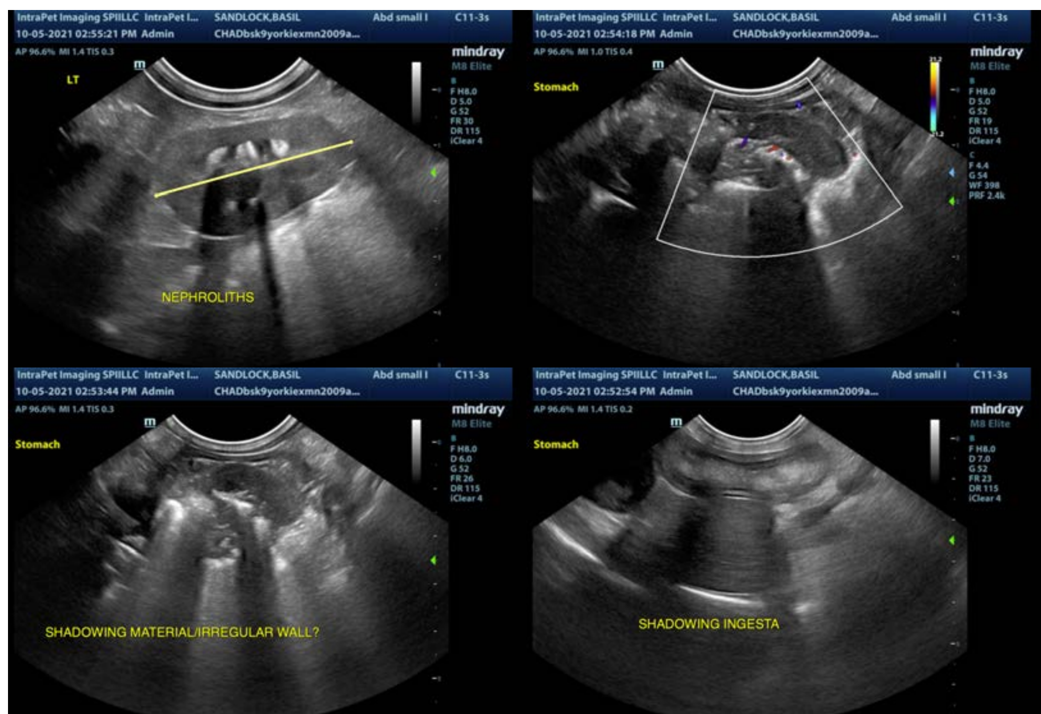
- Subjectively thickened small intestine – The mild small intestinal wall changes may be a normal variant in this patient or could be consistent with an inflammatory process (e.g., inflammatory bowel disease).

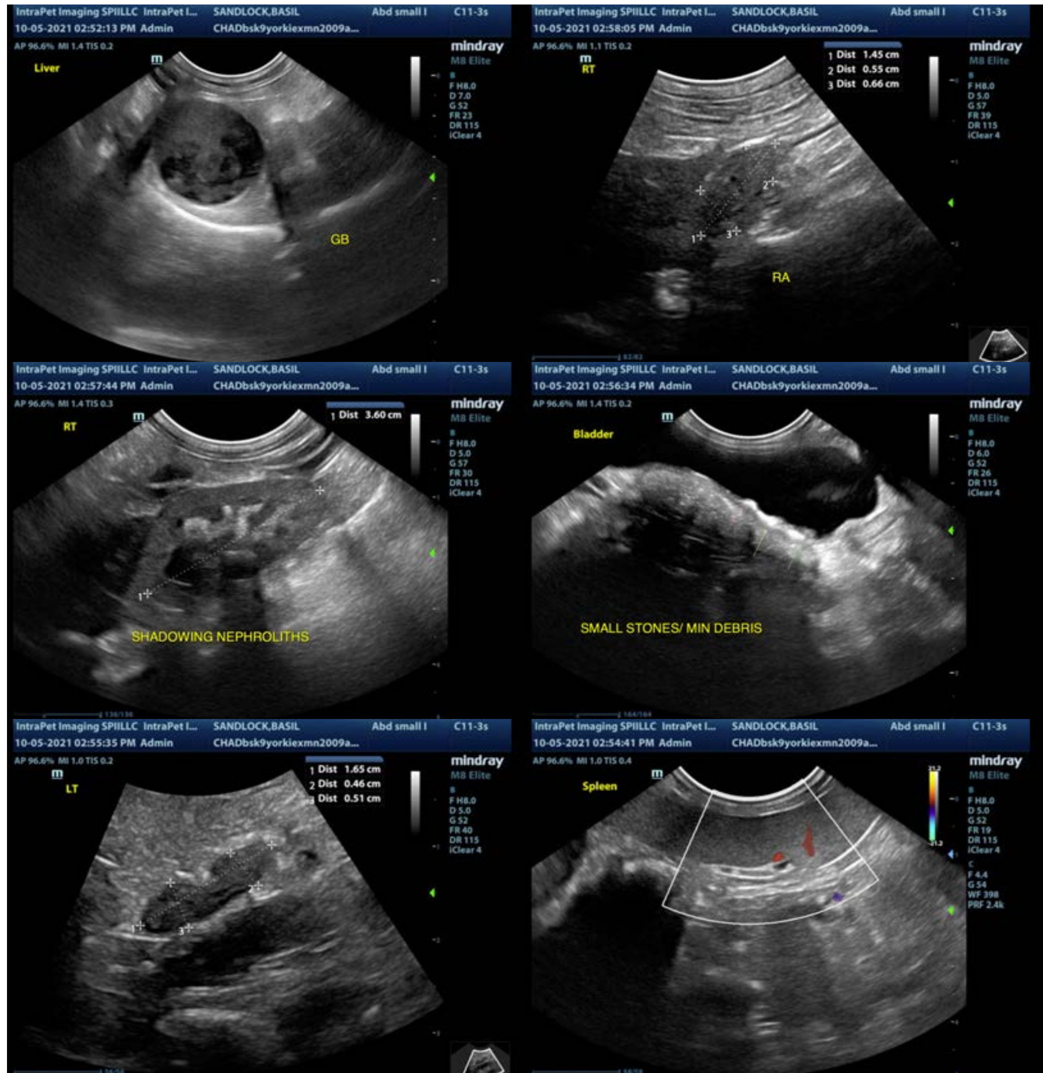
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No focal lesions are identified involving the liver. Additionally, the biliary tract appears normal. Correlate these findings with blood work available to further evaluate if a liver function test, testing for Leptospirosis, etc. would be warranted. Additionally, material in the colon and patient movement precludes full evaluation for a liver shunt.

The stomach appears somewhat abnormal. There is some shadowing material within the gastric lumen. This could be debris/foreign material. Additionally, you will sometimes see mineralized gastric mucosa with this appearance. In some views, the mucosa appears very normal, and in others, there is suspected irregularity and thickening. Correlate these findings with abdominal radiographs +/- barium study +/- promotility medication to empty stomach. If symptoms persist, consider upper GI endoscopy to further evaluate the gastric lumen. Additionally, you could consider a GI panel with PLI, TLI, cobalamin and folate to further evaluate for small intestinal disease and pancreatic disease.

Small stones are evident in the kidneys and urinary bladder. The nephroliths do not appear to be causing an obstruction, and the bladder stones are currently in the dependent portion of the bladder, but are small enough to potentially cause a future obstruction. Recommend radiographs to correlate size and location, and urinalysis and culture to look for concurrent infection. Recommend 3-view thoracic radiographs to evaluate the esophagus and thoracic structures.





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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