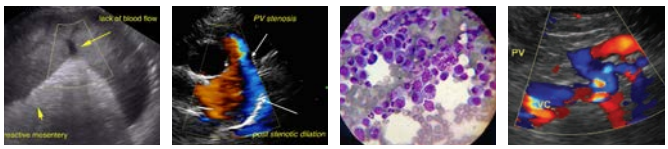
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT
BJ Chung

SPECIES
Canine

BREED
Schnauzer

SEX
Neutered Male

AGE
14 Years

WEIGHT
16.9 Pounds

INTERPRETED BY
Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY
Dr. Paul Kim

HOSPITAL NAME
Ridgefield Park AH

REFERRING VET
Dr. Paul Kim

INVOICE
40290

DATE
8/10/22

PRESENTING CLINICAL SIGNS

Patient presented today for anorexia for 3 days. Patient is lethargic. Not getting up. Not defecating for 3 days. Is urinating, but doesn't move to urinate.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

The interpretation is limited by the fact that pathology can be missed when interpreting primarily still images.

Urinary System

The urinary bladder is moderately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

The prostate is unable to be visualized in these images.

Kidneys are overall normal in size and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortices are uniform in texture with some mild increased cortical echogenicity and mild loss of corticomedullary distinction, expected in this age patient. There is no evidence of pyelectasia, mineral or infarcts observed. The left kidney measured 4.53 cm. the right kidney measured 4.0 cm.

Adrenal Glands

The right adrenal gland is normal in size (0.73 cm), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (0.21 cm at the caudal pole and 0.23 cm at the cranial pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

Spleen

Spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). Multifocal well-demarcated hyperechoic homogenous nodules are noted. Splenic vasculature appears normal.

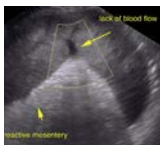
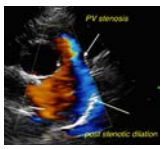
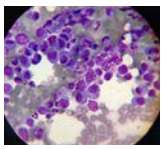
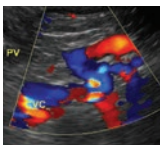
Liver

The liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is moderately distended with anechoic bile as well as suspended and gravity dependent echogenic debris. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.

Gastrointestinal

The stomach wall appears to be thick diffusely with a heterogeneous, hypoechoic appearance to the wall with emerging loss of layering. The lumen is empty with no evidence of obstruction or foreign material.

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

PATIENT
BJ Chung

SPECIES
Canine

BREED
Schnauzer

SEX
Neutered Male

AGE
14 Years

WEIGHT
16.9 Pounds

INTERPRETED BY
Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY
Dr. Paul Kim

HOSPITAL NAME
Ridgefield Park AH

REFERRING VET
Dr. Paul Kim

INVOICE
40290

DATE
8/10/22

The visible small intestines are normal in wall thickness and layering (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease. (See other)

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas. Dorsal to the urinary bladder, in the area of the colon, there is a tubular structure that is distended by hypo- to anechoic nodular heterogeneous structures, possibly enlarged lymph nodes.

Pancreas

The pancreas is unable to be visualized in these images. However, in the area of the pancreas in the cranial abdomen, there is clumped hyperechoic tissue that appears to be fat and mesentery. However, there are structures that appear similar to the area of the colon also in the cranial abdomen that are round, mixed nodules that may be within a bowel loop and may be transverse colon, or may be fluid and mesentery associated with pancreatitis versus enlarged nodes. The two cannot be differentiated based on these images.

Free Abdomen

Free abdominal changes have been described above in the area of the pancreas and the colon.

PRIMARY FINDINGS

- The changes in the colon and the stomach as well as the nodular appearing changes in the cranial abdomen are all concerning for thick nodular loss of layering associated with the bowel, including colon and stomach +/- the bowel loop that can't be differentiated in the cranial abdomen versus aggressive lymphadenopathy. Top differential if that is the case includes infiltrative neoplasia such as round cell neoplasia versus other. Normal gastrointestinal contents cannot be definitively ruled out, but are considered less likely.

SECONDARY FINDINGS

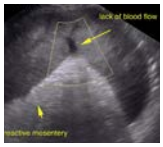
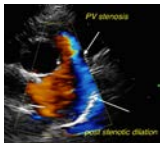
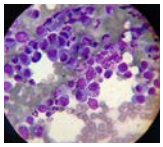
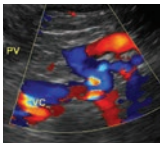
- Age related kidneys changes
- **Hyperechoic splenic nodules –** most consistent with benign myelolipomas. Other differentials such as fibrosis or calcification caused by old hematomas or infarcts, chronic inflammation, granulomatous disease or metastatic disease cannot be ruled out, but are considered less likely.
- **Gallbladder debris -** Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Given this patient's reportedly severely ill state, initial recommendations include supportive/symptomatic medical management and stabilization with IV fluids for rehydration, antiemetics, gastroprotectants, etc. A CBC/Chem panel, electrolytes, and urinalysis are also recommended if not already evaluated to help better direct symptomatic/supportive care.

Once the patient is stable, a fine needle aspirate of the structure (enlarged nodes) dorsal to the urinary bladder +/- the gastric wall and abnormal area in the cranial left abdomen is recommended if patient's coagulation status is appropriate.

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

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

PATIENT

BJ Chung

SPECIES

Canine

BREED

Schnauzer

SEX

Neutered Male

AGE

14 Years

WEIGHT

16.9 Pounds

INTERPRETED BY

Beth Johnson, DVM
DACVIM

IMAGING PERFORMED BY

Dr. Paul Kim

HOSPITAL NAME

Ridgefield Park AH

REFERRING VET

Dr. Paul Kim

INVOICE

40290

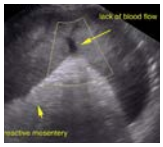
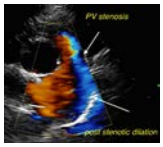
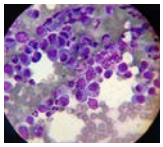
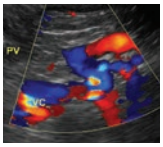
DATE

8/10/22

If a diagnosis is not obtained, and supportive care does not alleviate clinical signs, recheck imaging with videos of the stomach and the colon and the abnormal area in the area of the cranial abdomen if possible is recommended. Alternatively, an abdominal CT scan could be evaluated.

Three view thoracic radiographs are recommended for further assessment of cardio-pulmonary status as well as to further evaluate for any evidence of metastatic disease, if not recently evaluated.

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

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

PATIENT
BJ Chung

SPECIES
Canine

BREED
Schnauzer

SEX
Neutered Male

AGE
14 Years

WEIGHT
16.9 Pounds

INTERPRETED BY
Beth Johnson, DVM DACVIM

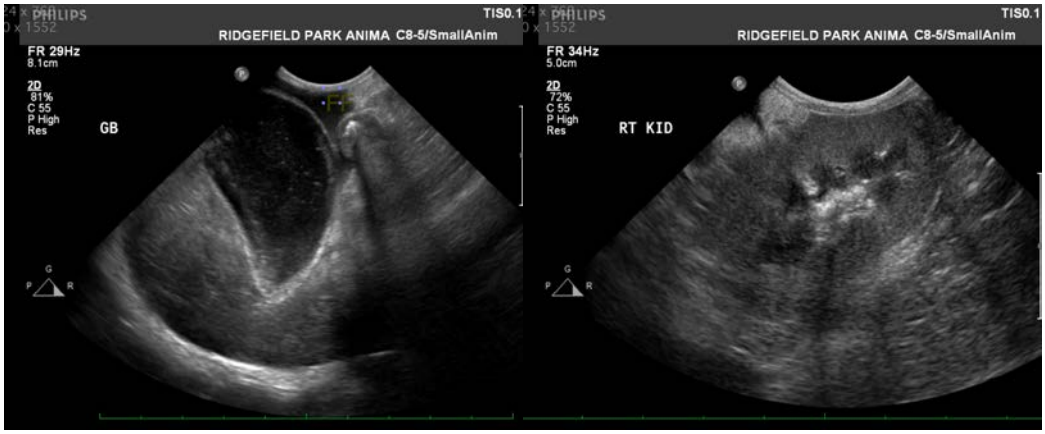
IMAGING PERFORMED BY
Dr. Paul Kim

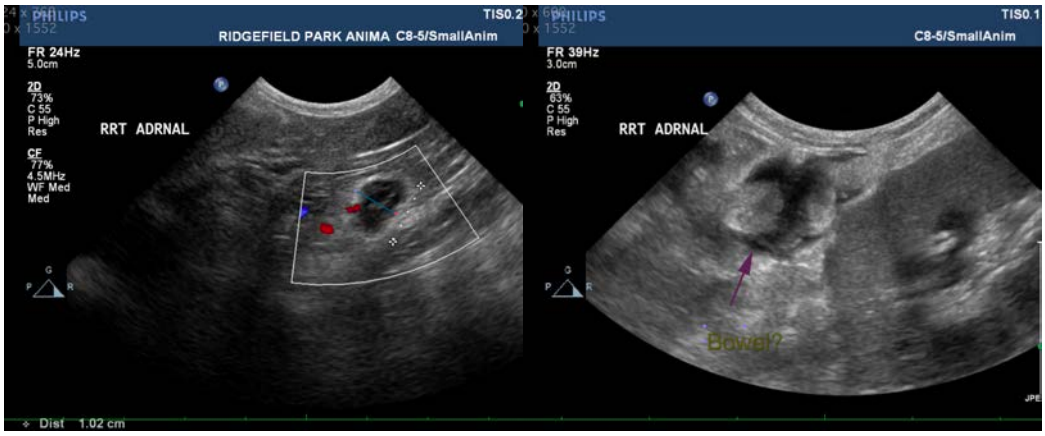
HOSPITAL NAME
Ridgefield Park AH

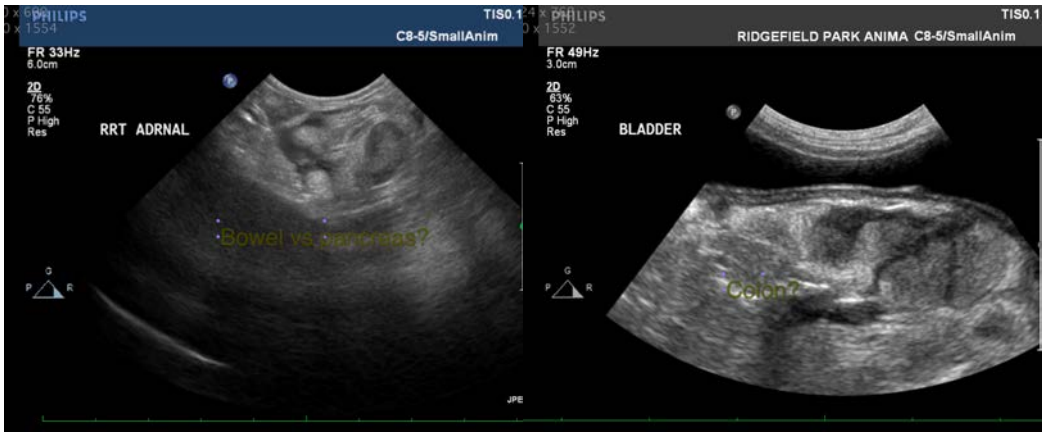
REFERRING VET
Dr. Paul Kim

INVOICE
40290

DATE
8/10/22







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.

Beth Johnson, DVM, DACVIM
Beth.Johnson@sonopath.com