



PATIENT PRESENTING CLINICAL SIGNS

Abe Berry History: Chronic weight loss thickened bowel on palpating. Elevated calcium albumin and anemic. Abnormal PE/Chem/CBC/UA Results: Elevated calcium anemic and mod elevation of renal enzymes

SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Feline **Urinary System**

BREED The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2.0 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with no uroliths or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes were noted.

DSH

SEX Normal renal size with asymmetrical margination was present in both kidneys. The renal cortex presented uniformly increased in echogenicity with uniform echotexture. The renal cortex appeared to be hypertrophied resulting in an altered cortex: medulla ratio. Mild loss of corticomedullary distinction was also present. The renal medullary volume was subjectively reduced. The left kidney measured 4.2 cm in length. The right kidney measured 4.4 cm in length.

Neutered Male

AGE **Adrenal Glands**

11 Years The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.54 cm.

WEIGHT The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.28 cm.

4 kg

INTERPRETED BY Spleen

R. McKenzie Daniel, DVM, DABVP (Canine and Feline) The spleen exhibited a finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. Acute to chronic inflammatory, neoplastic, or benign parenchyma changes were not noted.

IMAGING PERFORMED BY Liver

Dr. Belan The liver exhibited cystic to nonhomogeneous mass with associated mild hepatic capsule distortion in the mid liver parenchyma. The mass measured 4.5-5.0 cm in diameter. The mass potentially displaced the gallbladder ventrally.

HOSPITAL NAME The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content. The cystic and common bile ducts were normal.

Animal Clinic Downtown

REFERRING VET Gastrointestinal

Dr. Waldman The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with no signs of ileus, obstruction or foreign material.

INVOICE The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of ileus, obstruction or foreign material. The duodenum wall measured 0.21 cm. The jejunum wall measured 0.22 cm.

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PATIENT	The colon exhibited generalized intact yet mildly prominent wall layering. Subjective semi-formed feces were present in the colon lumen. The colon wall measured 0.28 cm. The ileocolic junction measured 0.31 cm.
Abe Berry	
SPECIES	Pancreas
Feline	The pancreas exhibited generalized variable to asymmetrical enlargement, including asymmetrical capsule contour. Generalized hypoechoic nonhomogeneous to hypoechoic pancreatic parenchyma, exhibiting subtle hypoechoic nodular changes. The left pancreas measured approximately 1.0 cm in width. Subtle evidence of peripancreatic reactive mesentery was noted.
BREED	
DSH	Free Abdomen
SEX	Intermittent mildly prominent to enlarged medial iliac nodes were present. The lymph nodes were essentially isoechoic to adjacent omentum without evidence of neoplastic or inflammatory criteria and maintaining a normal width: length ratio (<0.5). An example of lymph node measured 2.5 cm in diameter.
Neutered Male	Small pockets of scant peritoneal free fluid noted.
AGE	ULTRASONOGRAPHIC FINDINGS
11 Years	<ul style="list-style-type: none"> Enlarged hypoechoic nonhomogeneous/nodular pancreas- active to chronic active pancreatitis with parenchymal remodeling, possible areas of fibrosis and/or nodular hyperplasia. Pancreatic neoplasia is possible.
WEIGHT	<ul style="list-style-type: none"> Cystic to nonhomogeneous liver mass- cystic biliary adenoma, cystic biliary carcinoma or other possible.
4 kg	<ul style="list-style-type: none"> Overtly normal stomach and small bowel Mild colitis pattern Bilateral nonspecific chronic renal changes
INTERPRETED BY	
R. McKenzie Daniel, DVM, DABVP (Canine and Feline)	
IMAGING PERFORMED BY	INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS
Dr. Belan	Given the hypercalcemia, FNA of the nonhomogeneous to cystic liver mass, as well as the pancreas, using a 25-gauge needle and assuming normal clotting status is recommended for cytology. A GI panel to include PLI/TLI/Cobalamin/Folate, as well as three view chest radiographs to assess for occult pathology as a contributing factor to the weight loss is warranted. Further renal staging to include urine C/S and protein: creatinine ratio on sterile urine sample may be considered.
HOSPITAL NAME	Sampling the pancreas
Animal Clinic Downtown	<i>Crain SK, Sharkey LC, Cordner AP, Knudson C, Armstrong PJ. Safety of ultrasound-guided fine-needle aspiration of the feline pancreas: a case-control study. J Feline Med Surg. 2015 17(10):858-63.</i>
REFERRING VET	
Dr. Waldman	<i>The safety of fine-needle aspiration (FNA) of the feline pancreas has not been reported. The incidence of complications following ultrasound-guided pancreatic FNA in 73 cats (pancreatic aspirate [PA] cats) with clinical and ultrasonographic evidence of pancreatic disease was compared with complications in two groups of matched control cats also diagnosed with pancreatic disease that either had abdominal organs other than the pancreas aspirated (control FNA, n = 63) or no aspirates performed (control no FNA, n = 61). The complication rate within 48 h of the ultrasound and/or aspirate procedure</i>
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Abe Berry

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

11 Years

WEIGHT

4 kg

INTERPRETED BY

R. McKenzie Daniel,
DVM, DABVP
(Canine and Feline)

IMAGING PERFORMED BY

Dr. Belan

HOSPITAL NAME

Animal Clinic
Downtown

REFERRING VET

Dr. Waldman

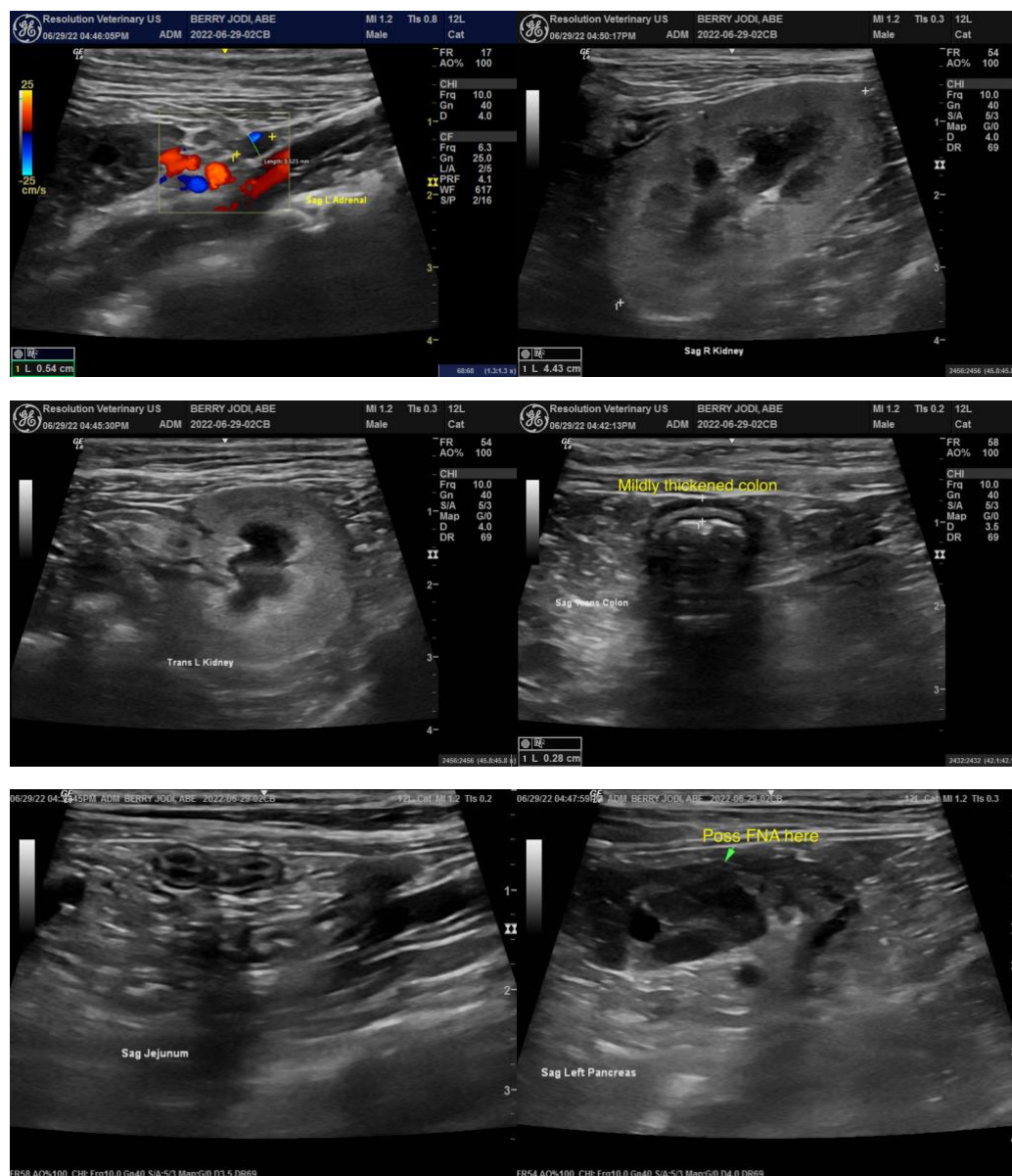
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did not differ among the PA cats (11%), control FNA (14%) or control no FNA (8%) cats. There was no difference in rate of survival to discharge (82%, 84% and 83%, respectively) or length of hospital stay among groups. The cytologic recovery rate for the pancreatic samples was 67%. Correlation with histopathology, available in seven cases, was 86%. Pancreatic FNA in cats is a safe procedure requiring further investigation to establish diagnostic value.





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SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

11 Years

WEIGHT

4 kg

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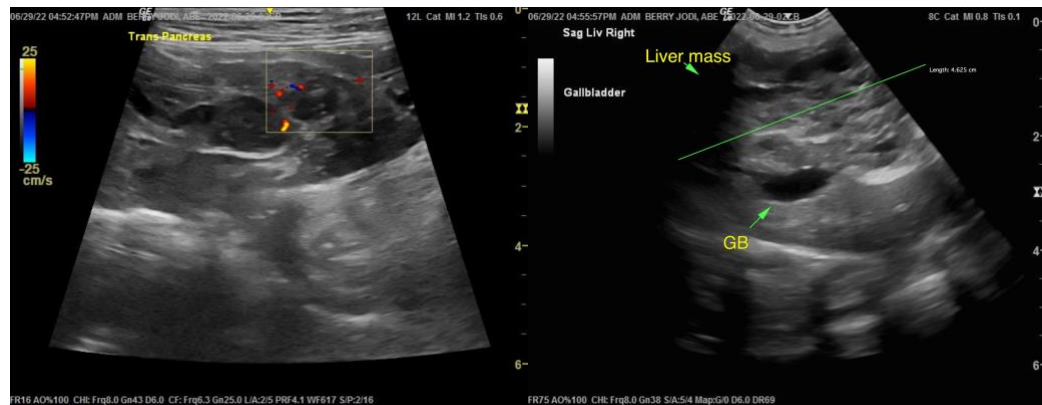
Dr. Waldman

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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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