



PATIENT	PRESENTING CLINICAL SIGNS
Salem LaFlamme	Presented anorexia and lethargy since yesterday, recent weight loss.
SPECIES	Abnormal PE/Chem/CBC/UA Results: mild dehydration, moderate to marked icterus Chemistry: ALT=139 (20-100) U/L, ALP=182 (10-90) U/L, Tbili=11.4 (0.1-0.6) mg/dL, amylase=1412 (300-1100) mg/dL, UA - usg=1.050, WBC: 5-10/hpf, cocci +/- rods, culture pending
Feline	
BREED	ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN
DSH	Urinary System
SEX	Urinary bladder is adequately distended. It has a normal uniform wall thickness. Contents include primarily anechoic fluid with a moderate to large amount of echogenic non-shadowing debris, which could be partially consistent with incidental suspended lipid in a cat, likely combined with exfoliated cells, mucous, and/or small blood clots. Both sterile inflammation as well as urinary tract infection can also present with echogenic debris. No masses or cystoliths are observed. The trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.
Spayed Female	
AGE	
9yr	The right kidney is normal in size (4.26 cm), shape, and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral, or infarcts observed.
WEIGHT	
11.6lbs	The left kidney is normal in size (3.95 cm), shape, and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral, or infarcts observed.
INTERPRETED BY	Adrenal Glands
Beth Johnson, DVM DACVIM	The right adrenal gland is normal in size (0.49 cm), shape, and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.
IMAGING PERFORMED BY	The left adrenal gland is unable to be well visualized in these images.
Dr. Sarah Green	Spleen
HOSPITAL NAME	The 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). No focal nodules or masses are observed. Splenic vasculature appears normal.
Healing Spirit Animal Wellness	Liver
REFERRING VET	Liver is subjectively enlarged (swollen contour) without disruption of architecture. It has a normal homogenous echotexture. Parenchyma is diffusely hyperechoic characterized by less prominent than normal portal vein walls and increased echogenicity relative to the spleen and falciform fat. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.
Dr. Sarah Green	
INVOICE	
10310	The gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.
DATE	
7/11/2023	Gastrointestinal
	The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is mildly distended with fluid, as well as echogenic non shadowing luminal contents and gas consistent with normal ingesta/chyme. There is no evidence of obstruction, foreign material, or infiltrative disease. Pyloric outflow tract appears patent.
	The visible small intestine demonstrates areas of thick muscularis layer relative to mucosa (disruption of the normal 1:3 muscularis:mucosa ratio). Small intestinal submucosa is slightly irregular, thick, and



PATIENT	hyperechoic, without evident loss of layering appreciated. The lumen of the small intestine is empty with no evidence of obstruction or foreign material.
Salem LaFlamme	
SPECIES	The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.
Feline	Pancreas
BREED	Pancreas is prominent (enlarged) in size, hypoechoic to surrounding tissue and has a mildly irregular undulating contour. Parenchyma is coarse with mixed echogenic remodeling noted. Pancreatic duct dilation is noted.
DSH	
SEX	Free Abdomen
Spayed Female	There is no evidence of free peritoneal effusion noted in these images.
AGE	ULTRASONOGRAPHIC FINDINGS
9yr	<ul style="list-style-type: none"> • Hyperechoic hepatomegaly – This appearance is most consistent with benign hepatic lipidosis. Infiltrative disease such as amyloidosis or round cell neoplasia, such as mast cell tumor or less likely, lymphoma, is also possible.
WEIGHT	<ul style="list-style-type: none"> • Inflammatory bowel disease (IBD) pattern – Thick muscularis has been reported with infiltrative bowel disease including both benign inflammatory disease as well as infiltrative neoplasia such as lymphoma. No aggressive lymphadenopathy, loss of layering, etc. is noted to make lymphoma more probable, but lymphoma cannot be definitively ruled out without tissue sampling.
INTERPRETED BY	<ul style="list-style-type: none"> • Chronic smoldering pancreatitis is suspected. • A large amount of urinary bladder debris
Beth Johnson, DVM DACVIM	
IMAGING PERFORMED BY	
Dr. Sarah Green	
HOSPITAL NAME	INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS
Healing Spirit Animal Wellness	There is no ultrasonographically visible evidence of post hepatic cholestasis in these images. Without anemia to support a pre hepatic cholestasis, a top differential for this patient reported icterus intrahepatic cholestasis. Given the concurrent liver, pancreas, and bowel changes top differential is “triaditis”. Having said that infiltrative neoplastic disease effecting the liver and bowel can’t be definitively ruled out without tissue sampling.
REFERRING VET	Therefore, recommendations include a fine needle aspirate of the liver if the patient's coagulation status is appropriate as well as a gastrointestinal malabsorption panel (including cobalamin, folate, TLI, and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function. Additionally, as is reportedly already pending a urine culture is recommended.
Dr. Sarah Green	
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7/11/2023	In the meantime, treatment recommendations include fluid therapy, anti-emetics, gastroprotectants, hepatic nutraceuticals such as ursodiol and/or Denamarin, and broad-spectrum antibiotics. Nutritional support is critical to prevent/manage concurrent hepatic lipidosis, so appetite stimulants and/or, if indicated, feeding tube placement is also recommended.



PATIENT

Salem LaFlamme

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

9yr

WEIGHT

11.6lbs

INTERPRETED BY

Beth Johnson, DVM
DACVIM

IMAGING PERFORMED BY

Dr. Sarah Green

HOSPITAL NAME

Healing Spirit Animal
Wellness

REFERRING VET

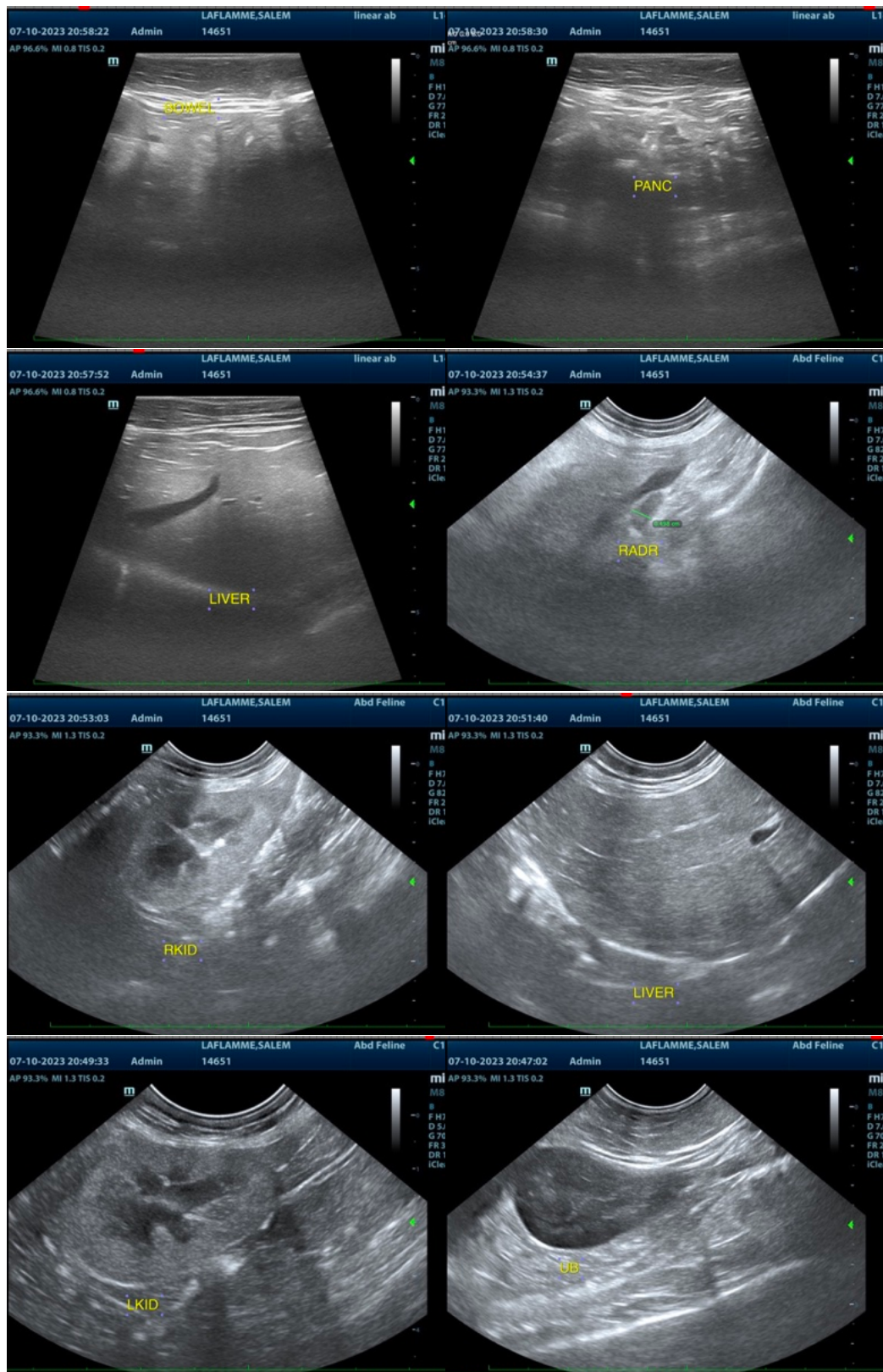
Dr. Sarah Green

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The information and recommendations provided are based on the images presented by the referring



PATIENT

Salem LaFlamme

veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

SPECIES

Feline

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
info@sonopath.com

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DSH

SEX

Spayed Female

AGE

9yr

WEIGHT

11.6lbs

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Wellness

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