



PATIENT PRESENTING CLINICAL SIGNS

Lucy Davis
Clinical Exam Findings: Overall PE is unremarkable. Slightly potbellied. Weight loss noted
Abnormal lab-work values: Elevated BUN on preanesthetic bloodwork
SPECIES Repeatable 3+ proteinuria. UPC 5.09. Globulins 4.5
Current Medications: none

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

BREED *Urinary System*

Yorkshire Terrier

The **urinary bladder** is moderately distended. The wall is normal in thickness with a relatively smooth mucosal surface. A few cystic calculi are visualized, the largest measuring 0.38 cm in diameter. The region of the trigone and the visible portion of the proximal urethra are normal.

SEX

Spayed Female

The **left kidney** is normal size (3.77 cm in length); with a slightly irregular shape. The cortex is variably thickened. There is mild to moderate loss of distinction. Several nonobstructive nephroliths are visualized. Pyelectasia is present (0.22 cm in the longitudinal plane). There is no evidence of hydroureter. Renal vasculature is normal.

AGE

12.3.12

The **right kidney** is normal size (4.20 cm in length); with a normal shape and smooth peripheral contours. The cortex is mildly thickened. There is mild to moderate loss of corticomedullary distinction. A few nonobstructive nephroliths are visualized. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

WEIGHT

9.78 lbs

Adrenal Glands

The **left adrenal gland** is enlarged (1.18 cm at cranial pole) (0.55 cm at caudal pole) (2.30 cm in length); with an irregular shape. A 1.47 x 1.08 irregular, hyperechoic to slightly heterogenous nodule/mass is observed at the cranial aspect. The parenchyma at the caudal aspect is slightly heterogenous with some loss of glandular detail. The phrenicoabdominal vein and surrounding vasculature appear normal with no obvious evidence of invasion.

INTERPRETED BY

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

The **right adrenal gland** is normal size (0.77 cm at cranial pole) (0.53 cm at caudal pole) (2.23 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.

IMAGING PERFORMED BY

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

Spleen

The **spleen** is normal in size (1.06 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.

HOSPITAL NAME

Foxbank VH

Liver

The **liver** is subjectively enlarged with normal swollen peripheral contours. The parenchyma is hyperechoic relative to the spleen and subtly heterogenous in appearance. No distinct focal lesions are observed. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion. The portal vein to caudal vena cava ratio is approximately 1: 1

REFERRING VET

Dr. Andi Winney

The **gall bladder** lumen is moderately distended. The wall is thin and smooth. Luminal contents are mostly anechoic. The cystic and common bile ducts are normal/not seen.

INVOICE

11204

Gastrointestinal

The **stomach and intestine** are free of stasis and exhibit normal peristaltic activity. The gastric lumen is not distended. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural

DATE

7.7.22



PATIENT

detail. Discreet masses are not identified. The colonic wall is normal. There is no evidence of an obstructive pattern.

Lucy Davis

SPECIES

Pancreas

The base and limbs of the pancreas are visible with normal curvilinear peripheral contours. The parenchyma is slightly hypoechoic relative to surrounding omental fat and slightly mottled in appearance. The pancreatic duct is visible but not overtly dilated. There is no evidence of peripancreatic inflammation or effusion.

Canine

BREED

Free Abdomen

The **peritoneal cavity** is normal. There is no evidence of inflammation or effusion. The abdominal **lymph nodes** are normal/not visible.

Yorkshire Terrier

SEX

Other

A brief echocardiogram reveals no evidence of pericardial effusion or obvious right atrial/auricular mass.

Spayed Female

AGE

ULTRASONOGRAPHIC FINDINGS

12.3.12

Primary Findings

WEIGHT

- Bilateral chronic, renal changes with nonobstructive nephrolithiasis and left pyelectasia
- Small, cystic calculi
- The left adrenal/mass could be consistent with a benign process (i.e., nodular hyperplasia) or neoplasia (i.e., adenoma, adenocarcinoma, pheochromocytoma).

9.78 lbs

INTERPRETED BY

Secondary Findings

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

- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.
- The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, regenerative nodular hyperplasia, and/or age-related remodeling. Inflammatory and infiltrative disease are considered less likely.

IMAGING PERFORMED BY

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

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

A urine culture and sensitivity and baseline blood pressure measurement are recommended.

HOSPITAL NAME

Foxbank VH

Regarding the proteinuria, consider the following:

REFERRING VET

Dr. Andi Winney

1. Further testing for infectious disease and neoplasia (i.e., heartworm testing, tick panel, thoracic radiographs) to assess for underlying causes of proteinuria.
2. Angiotensin II receptor blocker (e.g., telmisartan) +/- ACE inhibitor
3. Angiotensin II receptor blocker (e.g., telmisartan)
4. Antithrombotic (e.g., clopidogrel at 2.5 mg/kg PO q 24 hours)
5. Omega-3 fatty acids (65 mg/kg of DHA and EPA combined daily)
6. Prescription renal diet
7. Baseline blood pressure measurement with serial monitoring thereafter
8. Routine monitoring of UPC and bloodwork (CBC, chemistry panel) to assess for progressive disease

INVOICE

11204

DATE

7.7.22



PATIENT

Lucy Davis

Regarding the left adrenal nodule/mass, consider further testing for a functional tumor (i.e., low-dose dexamethasone suppression test or ACTH stimulation test, urine/blood catecholamine levels).

SPECIES

Canine

Regarding the cystic calculi, consider an attempt at medical dissolution with a prescription urinary diet and broad-spectrum antibiotics. Alternatively, a cystotomy with stone removal, analysis and culture can be considered once the patient's proteinuria has stabilized/improved. However, there is some risk of worsening renal disease if the patient becomes hypotensive under anesthesia.

BREED

Yorkshire Terrier

SEX

Spayed Female

AGE

12.3.12

WEIGHT

9.78 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

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

HOSPITAL NAME

Foxbank VH

REFERRING VET

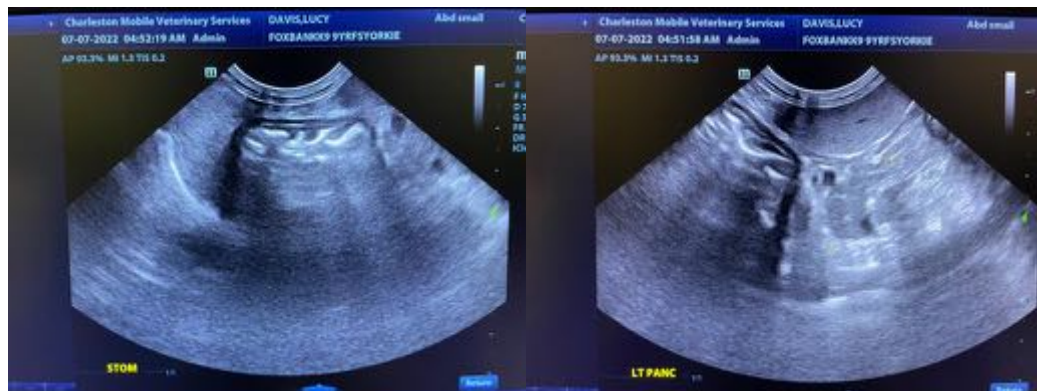
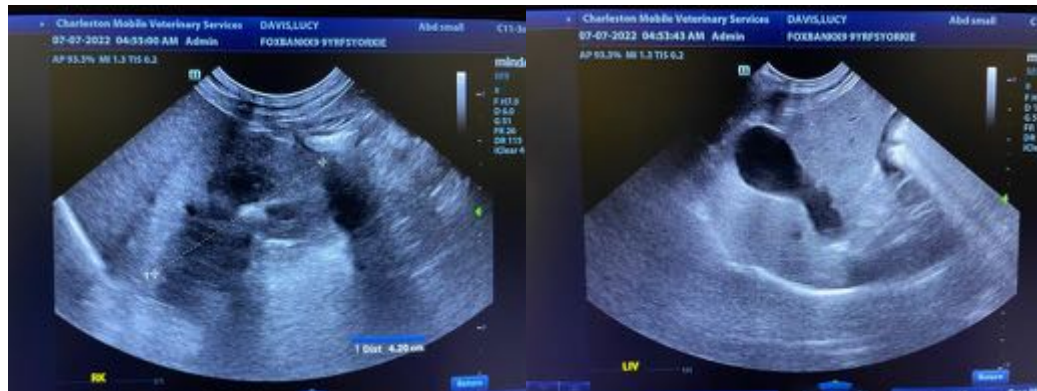
Dr. Andi Winney

INVOICE

11204

DATE

7.7.22





PATIENT

Lucy Davis

SPECIES

Canine

BREED

Yorkshire Terrier

SEX

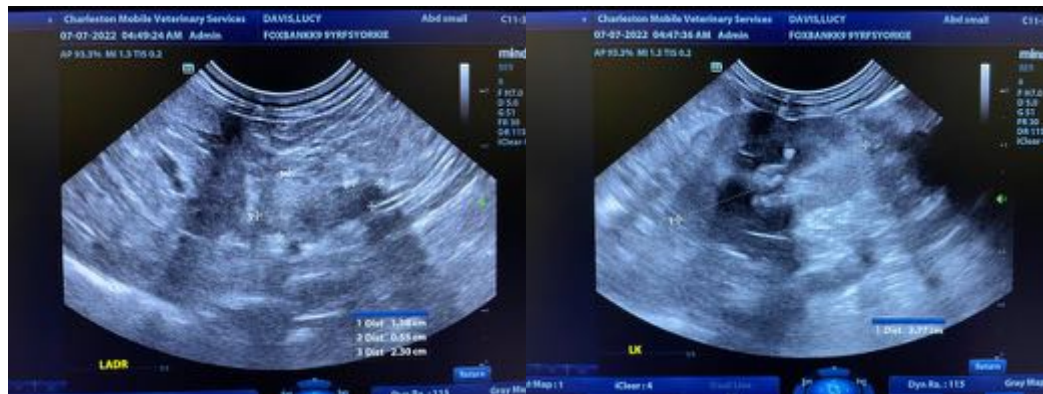
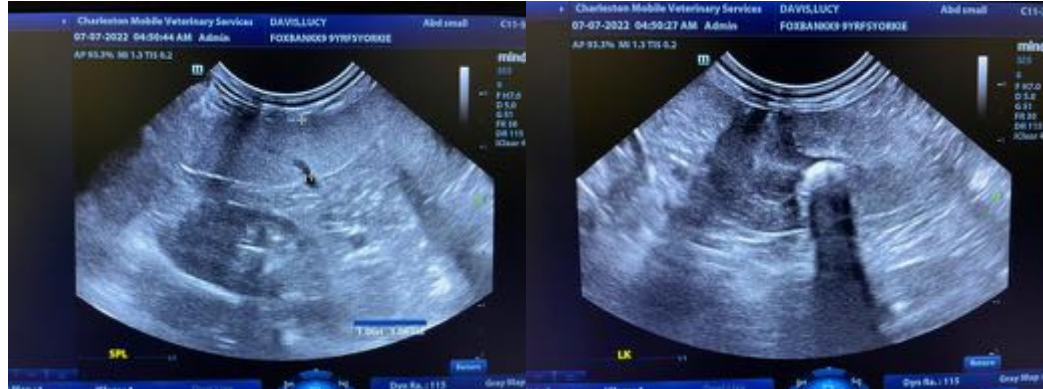
Spayed Female

AGE

12.3.12

WEIGHT

9.78 lbs



INTERPRETED BY

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

**IMAGING
PERFORMED BY**

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



HOSPITAL NAME

Foxbank VH

REFERRING VET

Dr. Andi Winney

INVOICE

11204

DATE

7.7.22

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.

Andrea Nicastro, DVM, Diplomate DACVIM (Small Animal Internal Medicine)
info@SonoPath.com