


**PATIENT PRESENTING CLINICAL SIGNS**

Lawrie Lee History: Recent history of hyporexia/anorexia, lethargy, hypoproteinemia, hypocholesterolemia, hyponatremia, normal ammonia. History of altered mentation, microhepatica, markedly elevated total serum bile acids (> 160), and suspected portosystemic shunt. Current therapies: lactulose, metronidazole

**SPECIES**

Canine Abnormal PE/Chem/CBC/UA Results:

**COMPUTED TOMOGRAPHIC STUDY OF THE ABDOMEN**
**BREED**

Miniature Schnauzer

A pre- and post-contrast CT study of the abdomen in a bone and soft tissue reconstruction is provided for review.

**COMPUTED TOMOGRAPHIC FINDINGS**
**SEX**

Neutered Male

The serosal fat presents normal attenuation behavior. There is no evidence of peritoneal effusion or peritonitis.

**AGE**

8 Years

Both kidneys present moderate irregular margins and a reduced volume (right>left). A moderate amount of mineral attenuating material is associated with the renal pelvis bilaterally. After contrast administration the cortex of the left kidney presents a well-defined spherical parenchymal filling defect measuring 7 mm in size. In the urinary bladder a moderate amount of sedimented hyperattenuating material is visible.

**INTERPRETED BY**

Sebastian Schaub,  
DVM Dr. med. vet.  
DipECVDI

The adrenal glands are within normal limits for size, shape and organ architecture.

The spleen presents with normal shape, even surface, uniformly attenuating parenchyma and homogeneous contrast enhancement, unremarkable.

The hepatic volume is moderately decreased and the gastric axis is displaced cranially. The hepatic parenchyma is uniform soft tissue attenuating and contrast enhancing.

**HOSPITAL NAME**

Animal Health  
Partners

In the gallbladder, multiple gravity dependent, mineral attenuating calculi, measuring up to 4 mm in size are visible.

**REFERRING VET**

Dr. Shannon  
Westgarth

The portal vein cranial to splenic vein is tapering cranially and the left intrahepatic branch presents a moderately decreased diameter. The left gastric vein is moderately dilated and an anomalous vessel is originating from the left gastric vein coursing cranially and dorsally beyond the gastric fundus, coursing dorsal to the left hepatic lobes up to the level of the diaphragm; level with the diaphragm the anomalous vessel is draining into a significantly distended phrenic vein. The anomalous vascular loop has a diameter of approximately 7 mm.

**INVOICE**

12994

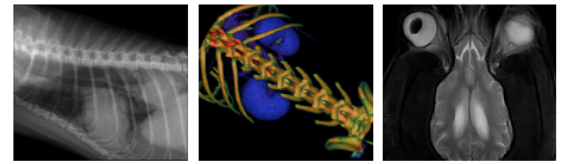
The pancreas is evenly contoured, the pancreatic parenchyma is homogeneous and presents uniform contrast enhancement.

The position, delineation, wall and content of the gastrointestinal tract are considered within normal limits throughout.

**DATE**

9/8/21

The lumbosacral intervertebral disc is mildly protruding into the vertebral canal.


**PATIENT COMPUTED TOMOGRAPHIC DIAGNOSIS**

- Lawrie Lee
- Single congenital extrahepatic portosystemic shunt, left gastric vein to phrenic vein (portophrenic shunt)
  - Microhepatica
- SPECIES**
- Canine
- Bilateral chronic nephropathy
  - Bilateral nephrolithiasis without evidence of obstruction
  - Moderate bladder sand
  - Cholecystolithiasis without evidence of obstruction
  - Mild intervertebral disc protrusion L7/S1
- BREED**
- Left sided renal cyst

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Miniature Schnauzer

The findings are compatible with a single congenital extrahepatic portosystemic shunt – porto-phrenic shunt. The findings explain the described clinical signs and the nephrolithiasis and bladder sand likely present ammonium urate.

**SEX**

Neutered Male

Surgical/interventional closure technique of the shunting vessel would be ideal, using a well slow gradual closure technique.

**AGE**

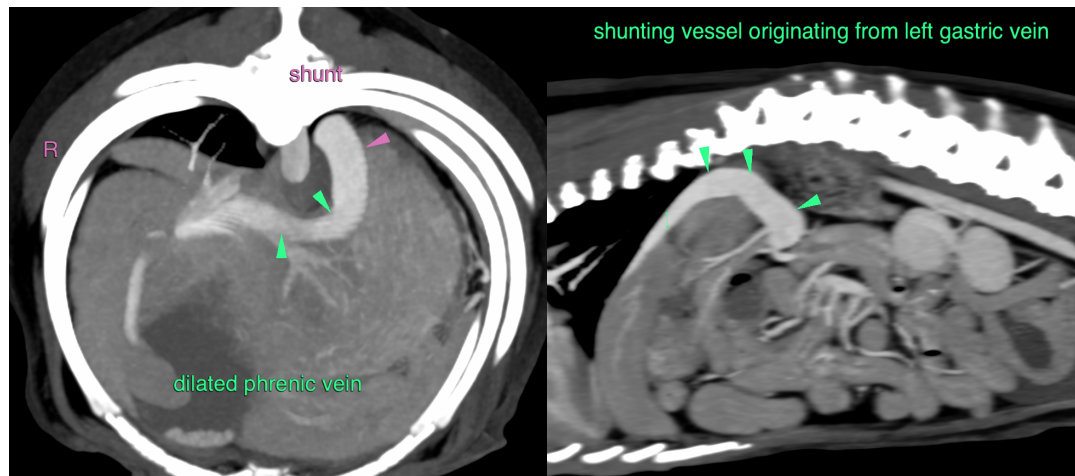
8 Years

**INTERPRETED BY**

Sebastian Schaub,  
DVM Dr. med. vet.  
DipECVDI

**HOSPITAL NAME**

Animal Health  
Partners


**REFERRING VET**

Dr. Shannon  
Westgarth

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.

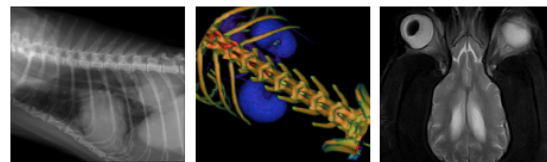
**INVOICE**

12994

Sebastian Schaub, Sebastian Schaub, DVM, Dr. med. vet. DipECVDI  
sebast.schaub@gmail.com

**DATE**

9/8/21



**PATIENT**

Lawrie Lee

**SPECIES**

Canine

**BREED**

Miniature Schnauzer

**SEX**

Neutered Male

**AGE**

8 Years

**INTERPRETED BY**

Sebastian Schaub,  
DVM Dr. med. vet.  
DipECVDI

**HOSPITAL NAME**

Animal Health  
Partners

**REFERRING VET**

Dr. Shannon  
Westgarth

**INVOICE**

12994

**DATE**

9/8/21