



**PATIENT PRESENTING CLINICAL SIGNS**

Feffy Bellaire diagnosed with chronic renal disease Tracheal collapse

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**SPECIES**

Canine

**Urinary System**

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.

**BREED**

Chihuahua

The prostate is symmetrically enlarged, measuring 2.6 cm wide with smooth margins that are well differentiated from surrounding tissue. Normal bilobed shape is maintained. Parenchyma is heterogeneous and hyperechoic. No mineral or cysts are noted.

**SEX**

Neutered Male

The kidneys are bilaterally subjectively small, mildly decreased to normal in size, irregular and diffusely echogenic with decreased corticomedullary distinction and poor visualization of internal architecture. There is no pyelectasia noted and no mineral is observed. The left kidney measured 3.0 cm. The right kidney measured 3.5 cm.

**AGE**

15 Years

**Adrenal Glands**

Right adrenal gland is normal in size (1.7 cm long x 0.43 cm at the cranial pole and 0.46 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

**WEIGHT**

3.25 kg

Left adrenal gland is normal in size (1.2 cm long x 0.40 cm at the cranial pole and 0.45 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

**Spleen**

**INTERPRETED BY**

Beth Johnson, DVM  
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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.

**Liver**

**HOSPITAL NAME**

Balmy Beach PH

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. A 2.0 cm round, homogeneous, iso- to hypoechoic nodule is seen just caudal to the gallbladder. Visible vasculature and biliary tree appear normal without distension or congestion.

**REFERRING VET**

Dr. Singh

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.

**Gastrointestinal**

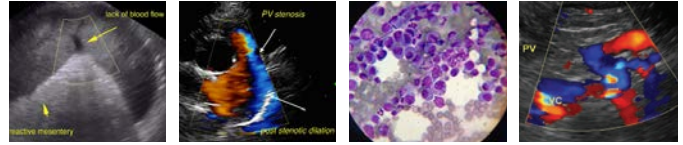
**INVOICE NUMBER**

34010

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 echogenic non-shadowing luminal contents and gas consistent with normal ingesta. There is no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

**DATE**

1/5/22



**PATIENT** Feffy Bellaire  
**SPECIES** Canine  
**BREED** Chihuahua  
**SEX** Neutered Male  
**AGE** 15 Years  
**WEIGHT** 3.25 kg

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 mildly distended with echogenic non-shadowing luminal contents and gas consistent with normal ingesta. There is no evidence of obstruction, foreign material or infiltrative disease.

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

**Pancreas**

Pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

**Free Abdomen**

There is no evidence of peritoneal effusion. There is no apparent lymphadenopathy (see other).

**Other**

In the caudal abdomen, just cranial to the urinary bladder, there is a 2.5 cm x 3.5 cm heterogeneous mass.

**ULTRASONOGRAPHIC FINDINGS**

- Caudal abdominal mass of unidentified tissue origin – Medial iliac lymph node/sublumbar lymph node are possible.
- Heterogeneous, hyperechoic, enlarged prostate for a reportedly neutered dog – If this patient is actually intact or was neutered recently, findings are consistent with benign prostatic hyperplasia. However, if this dog was neutered as a puppy, prostatic changes are more concerning for pathology such as prostatitis or infiltrative neoplasia.
- Hypoechoic liver nodule – Differentials include both benign changes such as nodular hyperplasia and/or (given the concurrent abdominal disease) metastatic neoplasia has to be considered.
- Chronic kidney disease - This appearance of the kidneys is consistent with chronic kidney disease such as chronic glomerular or interstitial nephritis, chronic pyelonephritis, etc.

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Given the presence of the enlarged prostate in a reportedly neutered dog as well as the concurrent mass/lymphadenopathy, recommendations include a fine needle aspirate of the mass/lymph node as well as the prostate if patient's coagulation status is appropriate, understanding there is a small risk of tumor seeding/trailing.

Other options include traumatic catheterization to obtain a prostatic wash or submission of urine to look for BRAF gene mutation, which is associated with urinary bladder/prostatic carcinoma. A fine needle aspirate of the liver nodule is also recommended if patient's coagulation status is appropriate. Thoracic radiographs are recommended to further assess for metastatic disease if not already performed.

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**PATIENT**

Feffy Bellaire

Given the history of chronic kidney disease as well as the prostatic changes, urinalysis and urine culture are also recommended. If the sediment is quiet but there is protein present, a urine protein/creatinine ratio is recommended to help guide treatment of the reported chronic kidney disease. A blood pressure is also recommended if not already evaluated.

**SPECIES**

Canine

**BREED**

Chihuahua

**SEX**

Neutered Male

**AGE**

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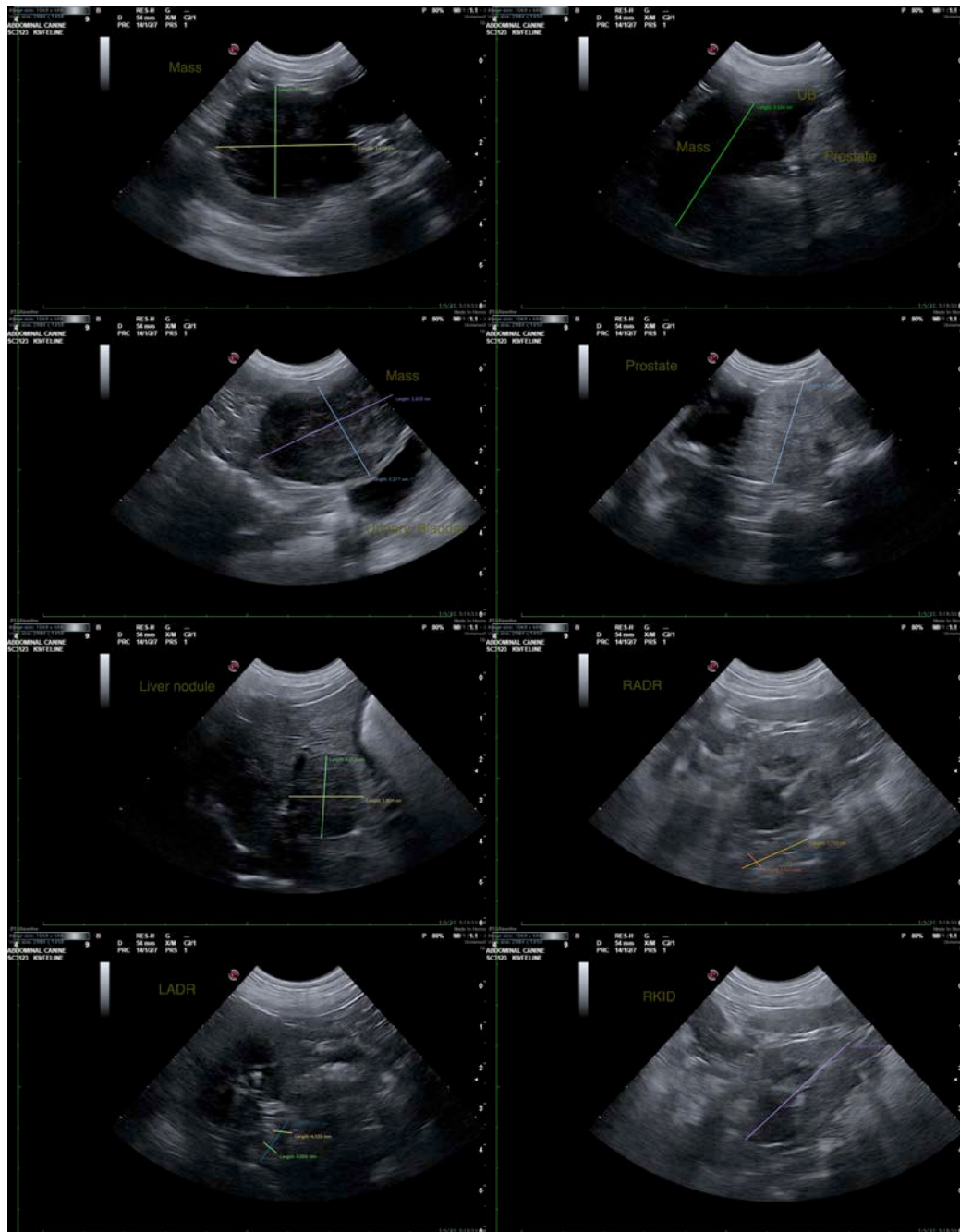
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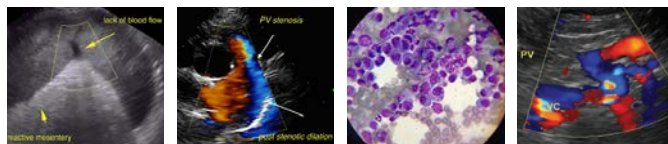
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**PATIENT**

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**SPECIES**

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**BREED**

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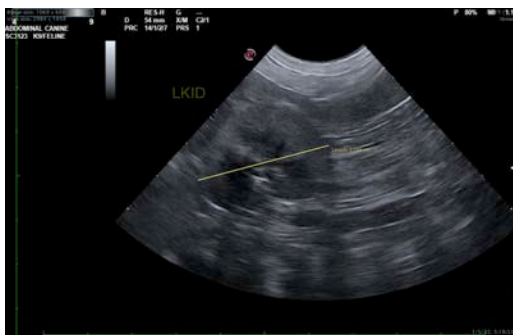
Neutered Male

**AGE**

15 Years

**WEIGHT**

3.25 kg



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.

**Beth Johnson, DVM, DACVIM**  
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