



## PATIENT

Styx Bain

## SPECIES

Canine

## BREED

Boxer

## SEX

Neutered Male

## AGE

8 Years 6 Months

## WEIGHT

65.6 Pounds

## INTERPRETED BY

Eric Lindquist, DMV,  
DABVP (CFM), Cert.  
IVUSS

## IMAGING PERFORMED BY

Aaron Lucas DVM,  
PhD

## HOSPITAL NAME

Taylorville VC

## REFERRING VET

Dr. Ashleigh Bissett

## INVOICE

37006

## DATE

5/8/26

## PRESENTING CLINICAL SIGNS

History: Styx is a 8.5 year old MN boxer mix who has a large cystic mass involving the perineal area and anus which is now impeding defecation. On biopsy of the cystic contents in 03/2026, there was a suspicion for possible hemangiosarcoma but IHC staining was not pursued to confirm. Patient also had a Grade II, low grade MCT removed at that time. Patient is anemic on presentation and has lost two pounds over the last month or two. BW: HCT 31, HGB 10.4, RBC 4.3, WBC 16.6, neut 14276. Urine occult blood 3+ and RBC >30.

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### *Urinary System*

The **urinary bladder** appeared overdistended. \*\*See Free Abdomen section.

The **kidneys** revealed normal size and structure, corticomedullary definition and ratio for this age. The cortices presented largely uniform texture with normal echogenic relationship to liver and spleen. Medullary structure differed distinctly from the cortex, and no evidence of pelvic dilation was present. The capsules were acceptably uniform without significant irregularities. The right kidney measured 7.4 cm. The left kidney measured 7.1 cm.

### *Adrenal Glands*

The **adrenal glands** were not visualized.

### *Spleen*

The **spleen** was largely smooth with subtle heterogeneous parenchymal changes while maintaining normal echogenic relationship to the liver and kidney. These changes are mild and consistent with normal age-related alteration. The capsule was smooth without noticeable impingement from within the spleen or from pathology in the adjacent abdomen. The splenic vasculature demonstrated normal volume without signs of congestion or significant contraction. Cranial folding of the spleen was noted. Subtle micronodular changes were noted in the spleen.

### *Liver*

The **liver** images submitted revealed subjectively normal liver size, contour, and structure. Parenchymal echogenicity was naturally coarse and hypoechoic to the spleen. Vascular and biliary tracts were of normal volume with no evidence of congestion. The gallbladder presented acceptably thin walls with primarily anechoic content. The cystic and common bile ducts were normal. No pathological hepatic lymphadenopathy was evident. No overt structural evidence of inflammatory, infiltrative or regenerative pathology was evident.

### *Gastrointestinal*

The **gastrointestinal** presentation revealed mild uniform prominence of the gastric mucosa as well as areas of "ropey" small intestinal wall with slight disruption of the normal 1:3 muscularis/mucosal ratio. The intestinal submucosa was slightly irregular, thickened and hyperechoic suggestive of low grade, chronic disease. No concerning lymphadenopathy was visible. No evidence of obstruction was present. Chronic inflammatory bowel disease is likely with a low possibility of an early neoplastic event such as lymphoma. Full thickness tissue biopsies via open laparotomy, ideally guided by intraoperative ultrasound in order to obtain the most representative mural sample, would be necessary to rule out



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this possibility. This is a minor change. The colon presented a minor amount of fluid stasis. \*\*See Free Abdomen section.

### *Pancreas*

The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Pancreatic duct and capsular contour were acceptably normal, and parenchyma respected normal curvilinear patterns. No overt evidence of active inflammatory or neoplastic disease was noted.

### *Free Abdomen*

The caudal abdomen revealed an undifferentiated cystic **mass**, measuring approximately 10.0+ cm, with areas of mineralization and encapsulated fluid accumulation. The origin of this mass is unclear. It appears to be deriving from the pelvic inlet and impinging upon the urinary bladder and appeared to deviate the colon.

## ULTRASONOGRAPHIC FINDINGS

- Undifferentiated cystic mass in the caudal abdomen – hemangiosarcoma versus cystic carcinoma are primary concerns.
- Minor intestinal thickening
- Overdistended urinary bladder
- Subtle micronodular changes in the spleen

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Ultrasound guided drainage of the cystic component of the mass and FNA of the parenchymal component is indicated. CT evaluation with contrast to assess the extent of the pathology into the pelvis is indicated. There is a possibility of prostatic origin, however, given the neutered state, this would be an odd presentation. Hemangiosarcoma deriving from the pelvic vessels or iliac vessels is also a potential. Spatial assessment of the mass was difficult to assess.





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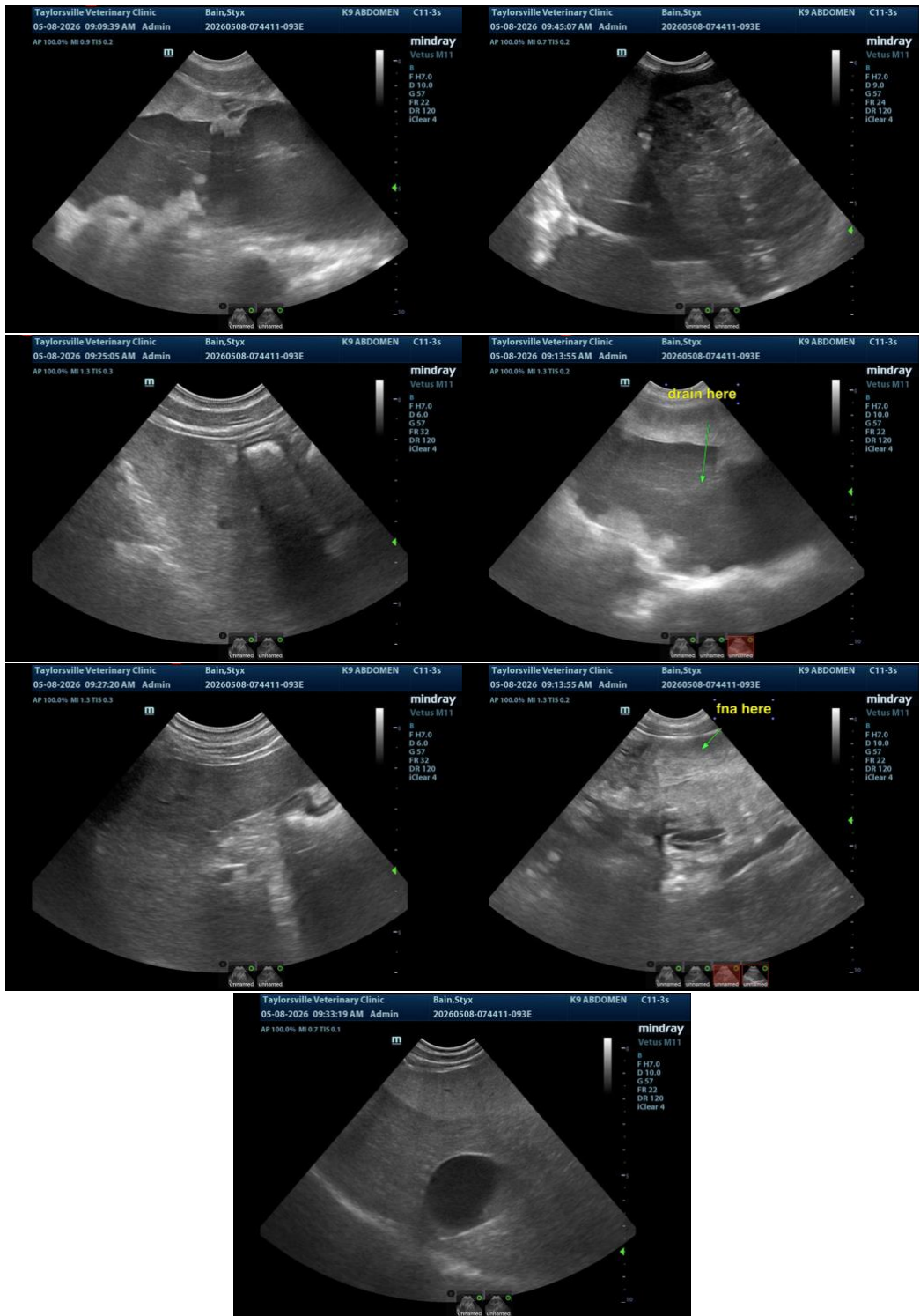
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The information and recommendations provided are based on the images presented by the referring



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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.

**Eric Lindquist**, DMV, DABVP(CFM), Cert. IVUSS,  
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