



**PATIENT PRESENTING CLINICAL SIGNS**

Pepper Graham History: Presented bleeding from both ears and nose. O thought ear infection. Bruising evident all over skin- ecchymosis and petechia

**SPECIES**

Canine

**BREED**

Chihuahua

**SEX**

Spayed Female

**AGE**

10 years

**WEIGHT**

4.8 kg

**INTERPRETED BY**

Remo Lobetti, BVSc,  
MMedVet (Med),  
PhD, Dipl. ECVIM

**IMAGING PERFORMED BY**

Laura Field

**HOSPITAL NAME**

Westview VH

**REFERRING VET**

Laura Field

**INVOICE**

13681

**DATE**

7.13.23

Abnormal PE/Chem/CBC/UA Results: x-ray report and bloodwork:

Diagnostics: CBC WNL, except: RBC 4.24 (N 5.65-8.87) LOW HCT 27.8 (N 37.3-61.7) LOW HGB 9.2 (N 13.1-20.5) LOW RETIC 164.9 (N 10.0-110.0) HIGH WBC 18.61 (N 5.05-16.76) HIGH NEU 12.35 (N 2.95-11.64) HIGH MONO 1.48 (N 0.16-1.12) HIGH PLT \*0 (N 148-484) LOW MPV 15.3 (8.7-13.2) HIGH PCT 0.00 (N 0.14-0.46) LOW Chemistry WNL, except: GLOB 4.8 (N 2.5-4.5) HIGH x-rays

Findings 7 total images are available for review - lateral and VD thorax, lateral and VD abdomen dated 7/10/23.

**Thorax:** The cardiac silhouette measures at the upper limits of normal to slightly large (11v VHS and >3.5 intercostal spaces wide). There is mild straightening of the caudal dorsal margin and increased opacity caudal to the carina in the region of the left atrium. The pulmonary vessels are within normal limits. The pulmonary parenchyma is unremarkable given the degree of inspiration. The trachea is normal. The esophagus are unremarkable. There is an irregular area of soft tissue opacity along the caudal ventral thorax superimposed with the apex of the cardiac silhouette on the lateral views. It is not correlated on the VD view. There is a faint rounded mineral opacity superimposed with the dorsal thoracic subcutaneous tissues, suspect mineralized granuloma.

**Abdomen:** The liver is normal for size and margination. The tail of the spleen is normal for size and margination. There is an approximately 4.5-5 cm oval soft tissue opaque mass in the left abdomen between the left kidney and head of the spleen on the VD view. It is suspected to be in the mid abdomen dorsal to the tail of the spleen and superimposed with bowel on the lateral views, most prominent on the left lateral view. The stomach has mild-moderate soft tissue and gas opaque contents along with a few angular mineral opacities. The small intestine is normal diameter with diffuse luminal gas. The cecum is gas-filled. The colon is normal diameter with formed feces. There are multiple small angular mineral opacities in bowel, mostly intermixed with feces. The urinary bladder is mildly distended and normal opacity. The visible portion of the kidneys are unremarkable - regions are indistinct due to summation with bowel. The abdominal serosal detail is within normal limits. Some of the caudal costal cartilages are irregularly-shaped and curved dorsally. The xiphoid also appears to angled dorsally. There are degenerative changes on the stifle joints. The right patella superimposed with the distal femur on the right lateral view. There is mild spondylosis deformans in the spine. Some of the cranial cervical disc spaces appear narrow. There are degenerative changes on the right elbow joint but it is incompletely included on the lateral view.

Conclusion:

1. Left mid abdomen soft tissue mass - suspect splenic, alternative possible organs of origin include pancreas or mesentery/lymph node. Differentials include hematoma, neoplasia, nodular hyperplasia, less likely granuloma or cyst. Ultrasound would be helpful for further characterization.
  2. Mild cardiomegaly and left atrial enlargement (such as with valvular disease) or possibly individual variant for size/shape. Correlation with cardiac auscultation, ECG and +/- echocardiography could be considered. No evidence of failure.
  3. Opacity in the caudal ventral thorax is thought to be pleural/mediastinal tissues/fat accentuated by the dorsal displacement of the costal cartilages. Loculated effusion/hemorrhage or soft tissue mass is considered less likely. Ultrasound may be helpful to rule out.
  4. No pulmonary nodules identified.
  5. Stifle degenerative joint disease. Right patella luxation.
  6. Narrow appearing cervical disc spaces could be an artifact of projection or associated with disc disease.
- Read By: Lisa Zekas, DVM, DACVR Path review of blood smear- strongly suspect IMHA



**PATIENT** **ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

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**Urinary System**

The urinary bladder is full, with a normal thickness and smooth appearance of the wall. Mottled echogenic mass in the trigone area.

Normal proximal urethra and iliac blood vessels.

Normal appearance and size of the iliac lymph nodes. Ureters not visualized, which can be considered a normal finding.

Normal renal size (left kidney 4.10 cm / right kidney 3.90 cm), architecture, echogenic appearance, cortico-medullary differentiation, which maintains a 1:3 cortex to medulla ratio, pelvis, and capsule. No infarcts, mineralization or renoliths evident.

**Adrenal Glands**

Normal shape, echogenic appearance, size (left 0.66 cm / right 0.41 cm), position, and appearance of the visible peri-renal vasculature.

**Spleen**

Normal size and echogenic appearance. Smooth homogenous parenchyma and regular curvilinear capsule. Normal volume of the splenic vasculature without any overt congestion or thrombosis evident. Large irregular mottled echogenic mass on the tail of the spleen (measuring approximately 2.80 x 4.00 cm in size).

**Liver**

Normal size, echogenic appearance, portal markings, and regular curvilinear capsule. No nodules or masses evident. Normal appearance of the hepatic and portal vasculature.

**Gallbladder**

The gallbladder is full containing small amount of hyperechoic sediment. Normal thickness and echogenic appearance of the wall. Normal size and appearance of the cystic and common bile duct.

**Gastrointestinal**

Normal appearance of the stomach, duodenum, small intestine, ileo-cecal junction, and colon with no loss of layering, 1:3 muscularis to mucosa ratio, normal wall thickness and peristaltic activity, and no distension of the lumen. Small amount of ingesta within the stomach and small amount of chyle within the small intestine.

**Pancreas**

Normal size and echogenic appearance. Regular capsule. Normal echogenic appearance of the mesentery and fat surrounding the pancreas.

**Free Abdomen**

Normal mesenteric lymph nodes. Small amount of acellular ascites present around the left kidney and splenic mass.

No ascites evident.

**ULTRASONOGRAPHIC FINDINGS**

**Primary Findings**

- Splenic mass



**PATIENT** • Urinary bladder mass

Pepper Graham

**Secondary Findings**

**SPECIES** • Gall bladder sediment

Canine

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**BREED**

The most likely etiology for the splenic mass would be neoplasia, with hematoma and granuloma less likely differential diagnoses.

Chihuahua

**SEX**

The most likely diagnosis for the urinary bladder mass would be a transitional cell carcinoma with granulomatous cystitis and chronic cystitis less likely differential diagnoses.

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Further assessment would be urinalysis, urine culture, BRAF analysis and/or catheter-assisted aspirate/biopsy of the urinary bladder mass, three-view thoracic radiographs and echocardiography to evaluate the right auricle and atrium for possible metastatic disease.

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With the presenting clinical signs and severe thrombocytopenia, immune-mediated thrombocytopenia, most likely secondary to the splenic mass, would be the most likely diagnosis.

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**INTERPRETED BY**

Initial therapy is aimed at correcting the thrombocytopenia by means of immune-suppressive drugs, as well as possible platelet transfusions, and once that has been resolved, splenectomy should be considered. Surgical resection of the urinary bladder mass is not a feasible option, as it is in the trigone area.

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Management with non-steroidal anti-inflammatory drugs would be recommended.

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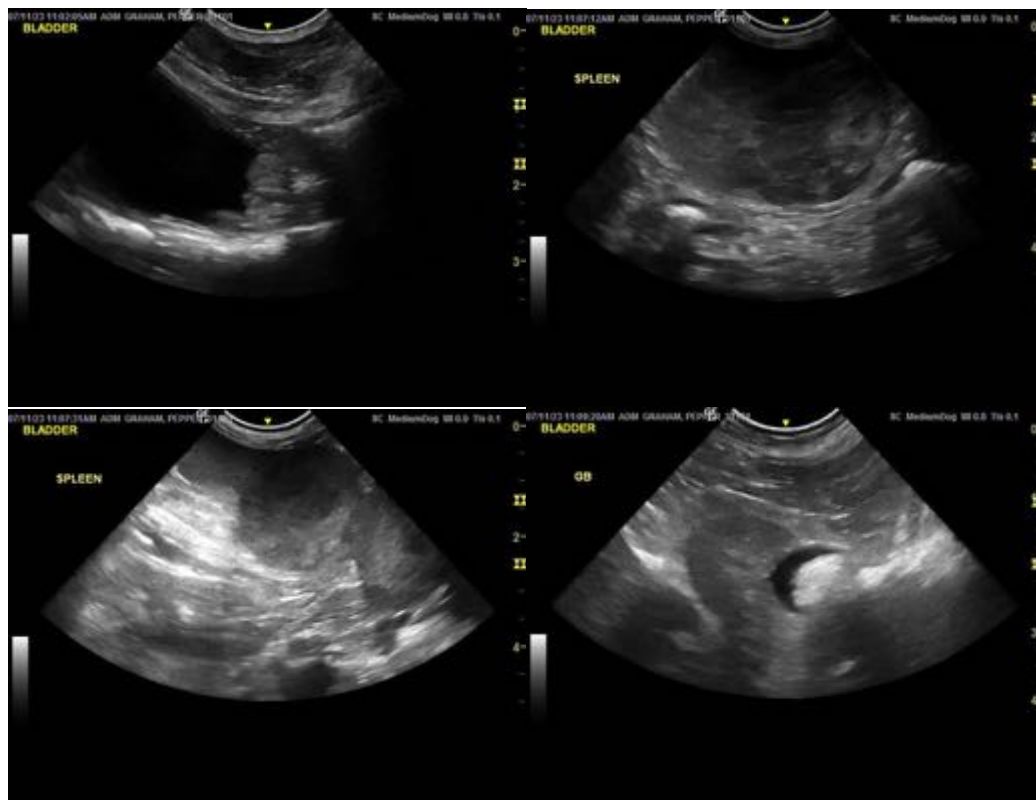
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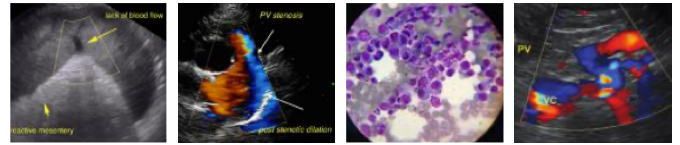
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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