



PATIENT PRESENTING CLINICAL SIGNS

PATIENT
Louise Freemman

SPECIES
K9

BREED
Chihuahua

SEX
SF

AGE
4

INTERPRETED BY
Nele Eley, DVM
Dr. med. Vet. DipECVDI

HOSPITAL NAME
Neel Veterinary Hospital

REFERRING VET
Dr. Kishore

INVOICE
56204

DATE
1-17-23

10/25/22-Patient presents today for an abdominal ultrasound. Patient was scheduled for a dental cleaning at rDVM today. Pre-operative blood work was WNL per owner but DVM palpated a mass in the abdomen near the spleen. RDVM referred to NVH for abdominal ultrasound today. No masses palpated on the skin. Erythematous toes on all 4 feet. Peripheral lymph nodes WNL. Lungs sound clear. No heart murmur ausculted. Went over initial thoughts based on abdominal US and rDVM abdominal rads. The mass looks like part of the spleen based on imaging; it does not appear to be causing major problems yet but is pressing on other abdominal organs. Impossible to say if is cancerous or an overgrowth of normal cells. Recommended chest radiographs and echocardiogram to check for tumor spread - estimate provided, owner approved. Official US report will be in later to determine if there are any other concerns from the imaging. If no signs of tumor spread, recommend surgery to remove the spleen +/- send out for histopathology. Splenic Hematoma 1/7/22- Louise presented today for abnormal breathing character, noticed since Thursday night. She was lying on the ground and her breaths became very shortened/ laborous. This would come and go. Owner also thought he heard some wheezing as well. Owner is unsure if she has been reverse sneezing but noticed yesterday she seemed to have a fit of hiccups. She is otherwise eating, drinking, urinating, defecating normally with no coughing. Louise has a history of splenectomy-- the biopsy report came back consistent with benign splenic hematoma. Besides the events noticed that brought her in today, she has been doing fine since the surgery. Dx: - Full panel bloodwork: mild elevated platelet count, all other parameters within normal limits - Chest radiographs: abnormal appearance to lung fields on right side; cardiac silhouette is obscured on left lateral projection and lung lobes appear somewhat retracted from chest wall on VD projection towards right cranial mediastinum area; lobar sign is consistent with pleural effusion --> radiographs have been sent out for specialist review Rx: - Doxycycline tablets: Give as prescribed for possible infectious respiratory disease. Antibiotic. Give with food. - Theophylline oral suspension: Give as prescribed for bronchodilator (airway-opening) effects. Rec- As Louise is very stable on exam I do not feel we need to hospitalize her but we will await the recommendations from the radiology report for next steps for her. Please keep a close eye on her in the coming days for any signs of decline to respiratory distress, inappetance, or other signs of illness and bring her back if you notice any of these signs. 1/16/23- Lethargic, shortness of breath P was seen last Saturday (1/7/23) for SOB, lethargic, wheezing. Took rads, got diagnosed with pleural effusion. Sent home on abx and theophylline. The abx were completed on 1/12.23 and the theophylline was last given on 1/9/23. Came back Thursday (1/12/23) for a chest tap and sent fluid out for pathology review. P brought in this morning for SOB, lethargic, not acting like herself. No C/S/V/D. E/D WNL as far as O knows. P goes on/off her food because she grazes. UR/BM WNL. P had a splenectomy Oct. '22.Lethargic, shortness of breath P was seen last Saturday (1/7/23) for SOB, lethargic, wheezing. Took rads, got diagnosed with pleural effusion. Sent home on abx and theophylline. The abx were completed on 1/12.23 and the theophylline was last given on 1/9/23. Came back Thursday (1/12/23) for a chest tap and sent fluid out for pathology review. P brought in this morning for SOB, lethargic, not acting like herself. No C/S/V/D. E/D WNL as far as O knows. P goes on/off her food because she grazes. UR/BM WNL. P had a splenectomy Oct. '22. Upon presentation, the pet had a history gathered, a physical examination performed, and the pet was placed in an oxygen cage. The pet presented today for continuation of intermittent abnormal breathing pattern, pleural effusion, inappetant, and lethargy. October 2022 The pet had a splenectomy performed in 10/22 and the report indicated it was not malignant. As a pre-anesthetic work up in 10/22, the pet had an echocardiogram and a full abdominal ultrasound. The echocardiogram did reveal mitral valve thickening, mild mitral regurgitation, mild tricuspid regurgitation, and mild pulmonic insufficiency. The pet's blood pressure at that time was 170. It was recommended to start either enalapril or benazepril (0.5mg/kg by mouth twice a day) and to recheck the blood pressure, but



PATIENT	<p>the pet was not started on either of those medications. The pet's abdominal ultrasound revealed a splenic mass (removed), mild pelvic dilation in the left kidney, few hyperechoic foci in the diverticuli region of the left and right kidneys, mild thickening of the urinary bladder, and an echogenic structure (1.4cm x 0.9cm) by the liver, duodenum, and right kidney. According to the owner, the pet recovered well from the surgery and the mass was found to be a splenic hematoma. January 7, 2023 Pet presented for intermittent abnormal breathing pattern. The pet had blood work performed and it revealed mildly elevated platelet count and the heartworm/tickborne disease test were all negative. The pet had a thoracic radiographs with specialist review. The pet appeared stable and went home with doxycycline and theophylline while awaiting the pet specialist report. The specialist noted bilateral pleural effusion (more severe on the right side), the shape and size of the cardiac silhouette were within normal limits, and no nodules/masses were noted. The potential causes for pleural effusion included right sided heart failure, chylothorax, hemorrhage, pyothorax, or neoplasia. It was recommended to obtain a sample of the pleural effusion and have it evaluated. If that doesn't provide a diagnosis, it is recommended to perform a thoracentesis and repeat radiographs, echocardiogram, and/or thoracic CT. January 12, 2023 The pet presented for recheck and indicates she is doing well at home. The pet finished the antibiotics today and hasn't give the theophylline since 1/9/23. The pet's thoracic radiographs revealed sustained pleural effusion. The owner agreed to obtaining a pleural effusion sample and submitting it for evaluation. The pet appeared stable and was sent home. The pleural effusion sample was classified as Lymphorrhagic Effusion. This effusions may be chylous or non- chylous in nature. Non-chylous effusions may not have a cloudy or opaque appearance, as is seen in this case. Whether chylous or non- chylous, common causes of lymphorrhagic effusions include idiopathic, secondary to cardiac disease, neoplastic or non-neoplastic masses obstructing lymphatic drainage, or other causes. No infectious agents or obvious neoplastic cells are identified. January 16, 2023 Pet presented today for continuation and/or worsening of abnormal breathing, lethargy, and inappetent. The pet's thoracic radiographs revealed sustained pleural effusion, but not obviously worse than last set of radiographs. The owner agreed to hospitalized care (oxygen cage) and further diagnostics. The pet had blood work repeated today. The CBC revealed elevated mildly low lymphocytes, elevated platelets, and elevated pct. The chemistry was all within normal limits. The urinalysis had specific gravity of 1.046, pH of 6.0, and the rest was within normal limits. The pet had a therapeutic thoracentesis performed and 270mL of fluids was removed. The pet had a full echocardiogram, abdominal radiographs, abdominal ultrasound performed and they were all submitted for specialist review (pending). The pet will have radiographs repeated to monitor if the pleural effusion returns. During the abdominal ultrasound, there was fluid seen in the abdomen, but a sample was not able to be collected. The pet will stay in the ICU overnight. Owner understands the pet may need further diagnostics, such as CT scan. The owner is also aware the outcome and prognosis for this pet is potentially poor. The owner was advised of the following diagnostic results: blood work, urinalysis, thoracic radiographs and echocardiogram, and abdominal radiographs and ultrasound. It was explained to the owner that the next diagnostic step in trying to determine the cause of the bicavitary effusion is a full body CT scan. The owner was given a quote of \$1600-1800 (estimate made by surgery team). The owner was informed that Dr. Kishore and I discussed the case. The owner was advised the two most likely causes of bicavitary effusion are cardiogenic (heart failure - which is ruled out in this case) or neoplasia. The owner was advised if he didn't want to move forward with more diagnostics, then we could try a round of steroids, but there is no way to determine if they would help the pet or make her worse. The owner understood. The owner did not want to commit to the CT scan at this time, but would like to keep the pet in the hospital for now. The owner would like to speak with his wife and will call us back with their decision.</p>
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Abnormal PE/Chem/CBC/UA Results: PLT 610 H, Lymphs 0.91 L,



PATIENT **COMPUTED TOMOGRAPHIC STUDY OF THE THORAX & ABDOMEN**

Louise Freemman Plain and post contrast studies available for review.

SPECIES **COMPUTED TOMOGRAPHIC FINDINGS**

K9 **Thorax**

Mild bilateral pleural effusion is noted and symmetrically distributed between the right and left pleural cavities. There also is a mild amount of free gas within the pleural cavities in their nondependent dorsal aspects.

BREED

Chihuahua The lung lobe margins are retracted from the thoracic wall and rounded. Mild pulmonary collapse is noted. No evidence of structural pulmonary changes is seen other than occasional subpleural interstitial bands.

SEX

SF The tracheobronchial and cranial mediastinal lymph nodes as well as the sternal lymph nodes present within normal limits. There is no evidence of a mediastinal mass.

The cardiovascular structures present within normal limits.

AGE

4 **Abdomen**

Minimal fat stranding and fluid is seen in the free abdomen.

INTERPRETED BY

Nele Eley, DVM Both kidneys present within normal limits for size, shape and organ architecture. After contrast administration a bilaterally symmetric and uniform nephro- and pyelogram is noted.

Dr. med. Vet. DipECVDI The adrenal glands are within normal limits for size, shape and organ architecture.

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The spleen is not seen in the abdomen.

Neel Veterinary Hospital The liver presents with normal shape, even surface, uniformly attenuating parenchyma and homogeneous contrast enhancement, unremarkable.

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

REFERRING VET

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

INVOICE

56204 A moderate amount of fluid is seen between the layers of the ventral abdominal wall and within the ventral abdominal subcutaneous tissue.

56204

COMPUTED TOMOGRAPHIC DIAGNOSIS

DATE

1-17-23

- Mild bilaterally symmetric liquido-pneumothorax
- No evidence of structural lung disease
- No evidence of a pulmonary mass
- Subcutaneous fluid accumulation in the ventral abdominal wall.
- Minimal peritoneal effusion.



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Louise Freemman

- Absent spleen – likely history of splenectomy.

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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No structural pathology is seen in the thorax or abdomen that would explain the pleural and peritoneal fluid accumulations. Exudate, transudate, and modified transudate as well as chylous effusions are potential differential diagnoses and further definition by means of aspiration and analysis of the pleural fluid has been performed already. With the chylous effusion, idiopathic chylothorax appears to be a primary differential diagnosis in this patient considering the negative CT screening for structural pathology in the thorax.

The reason for the presumed splenectomy is unknown and to be correlated with the CT and the remainder of the findings.

The subcutaneous fluid in the ventral abdominal wall may represent edema, hematoma, and less likely cellulitis.

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.

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