



## PATIENT

Luna Gomez

## SPECIES

Canine

## BREED

American Bulldog

## SEX

FS

## AGE

8Y

## WEIGHT

52lbs

## INTERPRETED BY

Tilde Rodrigues Froes,  
DMV, MSc., Dr. Med  
Vet., Dipl. CBraRVet

## IMAGING PERFORMED BY

Mobile Pet Imaging

## HOSPITAL NAME

Mobile Pet Imaging

## REFERRING VET

Armstrong

## INVOICE

74715

## DATE

4-21-26

## PRESENTING CLINICAL SIGNS

Per owner pet is not wanting to jump off the bed and suspects something wrong with the right shoulder. X-rays report shoulder wnl, ileus, pleural effusion and recommended a CT Scan.

## COMPUTED TOMOGRAPHIC STUDY OF THE THORAX

A pre- and post-contrast CT study of the thorax is provided for review totaling 5 series. One pre-contrast series of the thorax (bone algorithm). Three post-contrast series of the thorax (soft tissue algorithm), One additional, post-contrast abdominal series.

## COMPUTED TOMOGRAPHIC FINDINGS

A moderate bilateral pleural effusion is present. Mild regional pleural thickening with a regionally diffuse pattern is noted in the ventral region, silhouetting the fourth sternebra ventrally.

Within the pulmonary parenchyma, a peripheral, subpleural soft tissue attenuating lesion with a predominantly nodular appearance is identified in the most cranial and apical portion of the cranial segment of the left cranial lung lobe, measuring approximately 1.3 × 1.5 cm, located at the level of the second intercostal space.

The remaining portions of the left cranial lung lobe demonstrate bronchovascular bundle thickening, resulting in loss of the normal bronchus-to-artery ratio. In the right lung lobes, the bronchial walls and bronchus-to-artery ratio are more preserved; however, there are scattered peripheral foci of pulmonary consolidation, ground-glass attenuation, associated with reduced pulmonary volume (retraction).

The cranial mediastinal lymph nodes are mildly enlarged. The left tracheobronchial lymph node is also mildly enlarged. Sternal lymph nodes are within normal limits.

The trachea and main bronchi are within normal limits.

The cardiac silhouette and visible pulmonary vessels are unremarkable, with adequate post-contrast opacification.

The diaphragm, thoracic wall, ribs, and associated musculoskeletal structures are unremarkable.

The thoracic esophagus is unremarkable.

## COMPUTED TOMOGRAPHIC DIAGNOSIS

- Moderate bilateral pleural effusion with mild regional ventral pleural thickening.
- A peripheral subpleural pulmonary nodule is present in the left cranial lung lobe, associated with ipsilateral bronchovascular bundle thickening. Differential diagnoses include primary pulmonary carcinoma with lymphangitic or lymphovascular locoregional spread, or metastatic pulmonary disease of unknown origin. Less likely considerations include inflammatory or infectious bronchointerstitial disease. Additional differentials for the subpleural nodule include pulmonary granuloma or, less likely, rounded atelectasis.
- Mild enlargement of the cranial mediastinal and left tracheobronchial lymph nodes, which may represent reactive lymphadenitis or metastatic involvement.
- Scattered peripheral foci of pulmonary consolidation with associated pulmonary retraction in the right lung. Differential diagnoses include secondary atelectasis related to pleural effusion.



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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The CT findings are highly suggestive of a primary pulmonary carcinoma of the left cranial lobe with suspected lymphangitic spread, evidenced by the associated bronchovascular bundle thickening pattern recently characterized in dogs with metastatic carcinoma (Wise et al., 2026).

The bilateral pleural effusion and regional lymphadenopathy further support loco-regional neoplastic involvement. Although inflammatory or infectious etiologies cannot be completely excluded, they are considered less likely.

Thoracocentesis is recommended for cytological evaluation of the pleural fluid and to improve patient comfort.

Fine-needle aspiration (FNA) or biopsy of the pulmonary nodule is recommended, if accessible, potentially via thoracoscopic guidance.

Technical notes: Moderate beam hardening artifacts are present. The shoulder joints were not included in the field of view (not collimated).

Reference: Wise, Robert, Maria Mulvihill, Jennifer Reetz, Bianca Pfisterer, and Wilfried Mai. 2026. "Histopathologic Findings in Three Dogs With Metastatic Carcinoma Presenting With Bronchovascular Bundle Thickening on Computed Tomography." *Veterinary Radiology & Ultrasound* 67 (1): e70120. <https://doi.org/10.1111/vru.70120>.

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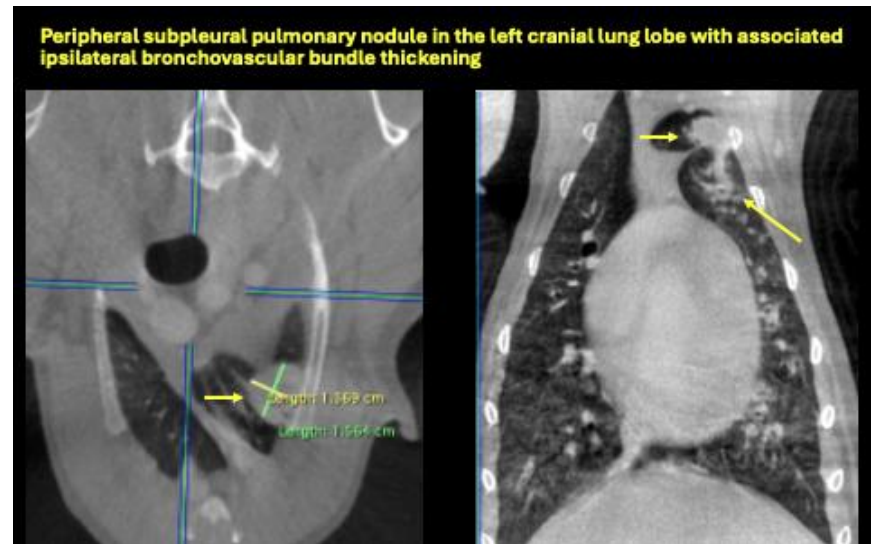
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

**Tilde Rodrigues Froes, DMV, MSc., Dr. Med.Vet., Dipl.CBraRVet**  
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