



PATIENT

Chester Rogers

SPECIES

Canine

BREED

Shih Tzu X

SEX

MN

AGE

17Y

WEIGHT

7.1kg

INTERPRETED BY

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

IMAGING PERFORMED BY

AS/AMC

HOSPITAL NAME

Green Dog Dental and
Wellness

REFERRING VET

Michael Geist

INVOICE

74982

DATE

5-13-26

PRESENTING CLINICAL SIGNS

Problem List:

Chronic bronchitis - r/o progressive airway disease, tracheal collapse

Mitral valve disease stage B2 - r/o progression to congestive heart failure

Tracheal collapse - r/o progressive collapse, secondary airway inflammation

Abnormal PE/Chem/CBC/UA Results: Diagnostics: Thoracic radiographs (3 views): Left-sided cardiomegaly on VD view, enlarged caudal cardiac waist on lateral view, tracheal collapse, moderate diffuse bronchointerstitial pattern, bronchoectasis noted, no evidence of congestive heart failure, osteoarthritis at caudal aspect of humeral head

RADIOGRAPHIC STUDY OF THE THORAX

Orthogonal thoracic radiographs were provided for review, including two ventrodorsal projections, one right lateral projection, and one left lateral projection.

RADIOGRAPHIC FINDINGS

A small semicircular soft tissue opacity is superimposed over the dorsal aspect of the caudal cervical trachea.

Both lateral projections were acquired during expiration, more pronounced on the left lateral projection. Mild subjective narrowing of the intrathoracic trachea near the level of the carina is identified on the right lateral projection, although this may be accentuated by expiratory phase positioning.

Mild reduction in pulmonary inflation on the lateral projections results in diffuse increased unstructured interstitial pulmonary opacity.

On the ventrodorsal projections, pulmonary inflation is improved, allowing better pulmonary assessment. A mild diffuse bronchial pulmonary pattern is present. No evidence of alveolar pulmonary opacity is identified.

The cardiac silhouette is subjectively at the upper limits of normal to mildly enlarged, occupying approximately 3.5 intercostal spaces on the lateral projections and approximately 65% of the thoracic width on the ventrodorsal projection. Mild straightening of the caudal cardiac border and mild focal bulging in the region of the left atrium are present on the lateral projection. Vertebral heart score (VHS) is approximately 9.0. Vertebral left atrial score (VLAS) is approximately 2.0, within normal limits.

Pulmonary vessels are within normal radiographic limits.

The pleural space and mediastinum are unremarkable.

The diaphragm, ribs, thoracic wall, and visible cranial abdomen are within normal radiographic limits.

Mild bilateral periarticular mineralization/osteophytosis is present involving the humeral heads, more pronounced on the left side.

RADIOGRAPHIC DIAGNOSIS

- Mild diffuse bronchial pulmonary pattern. Differential diagnoses include mild chronic inflammatory lower airway disease, and/or infectious bronchitis.



PATIENT

Chester Rogers

SPECIES

Canine

BREED

Shih Tzu X

SEX

MN

AGE

17Y

WEIGHT

7.1kg

INTERPRETED BY

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

IMAGING PERFORMED BY

AS/AMC

HOSPITAL NAME

Green Dog Dental and
Wellness

REFERRING VET

Michael Geist

INVOICE

74982

DATE

5-13-26

- A small semicircular soft tissue opacity is superimposed over the dorsal aspect of the caudal cervical trachea. Differential diagnoses include tracheal collapse and/or summation artifact or mild redundancy of the dorsal tracheal membrane
- Questionable mild dynamic narrowing of the intrathoracic trachea near the carina, which may be accentuated by expiratory phase imaging; mild tracheobronchomalacia cannot be excluded.
- Mild enlargement of the left atrium region.
- No radiographic evidence of left-sided congestive heart failure.
- Mild bilateral humeral degenerative joint disease.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The pulmonary findings are most consistent with mild chronic inflammatory airway disease or infectious bronchitis. Although mild narrowing of the intrathoracic trachea is suspected, evaluation is limited by expiratory phase imaging, and definitive radiographic confirmation of clinically significant tracheal collapse cannot be established on the current study. Clinical correlation is recommended. Bronchoscopy and/or fluoroscopic evaluation may be useful for further assessment and definitive diagnosis.

There is mild subjective left-sided cardiac enlargement; however, pulmonary venous congestion and cardiogenic pulmonary edema are not identified, and there is no radiographic evidence of active congestive heart failure at this time. Additionally, the vertebral left atrial size (VLAS) is within normal limits.

If clinical concern for dynamic airway collapse persists, fluoroscopic evaluation or inspiratory/expiratory cervical and thoracic radiographs may be considered for further assessment.

Fig. 1. Mild diffuse bronchial pattern





PATIENT

Chester Rogers

SPECIES

Canine

BREED

Shih Tzu X

SEX

MN

AGE

17Y

WEIGHT

7.1kg

INTERPRETED BY

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

IMAGING PERFORMED BY

AS/AMC

HOSPITAL NAME

Green Dog Dental and
Wellness

REFERRING VET

Michael Geist

INVOICE

74982

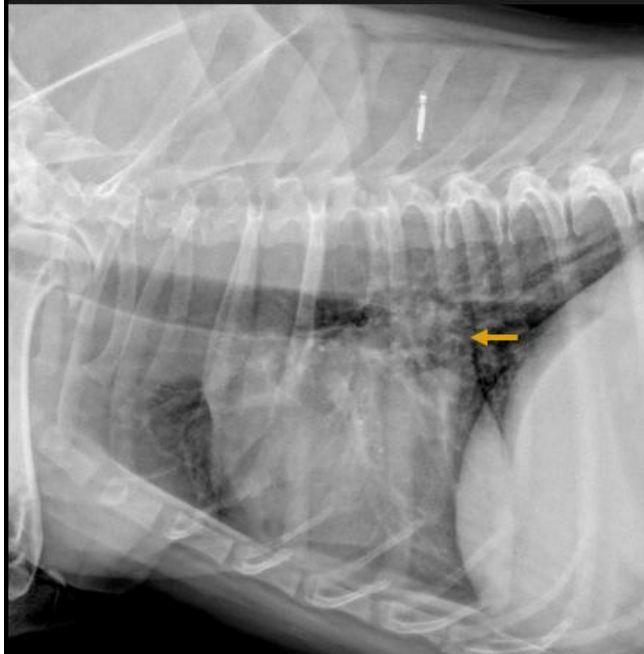
DATE

5-13-26

Fig. 2. Right lateral view. Mild subjective narrowing of the intrathoracic trachea near the level of the carina, with redundancy of the dorsal tracheal membrane.



Fig. 4. Focal bulging in the region of the left atrium on the lateral projection.





PATIENT

Chester Rogers

SPECIES

Canine

BREED

Shih Tzu X

SEX

MN

AGE

17Y

WEIGHT

7.1kg

INTERPRETED BY

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

IMAGING PERFORMED BY

AS/AMC

HOSPITAL NAME

Green Dog Dental and
Wellness

REFERRING VET

Michael Geist

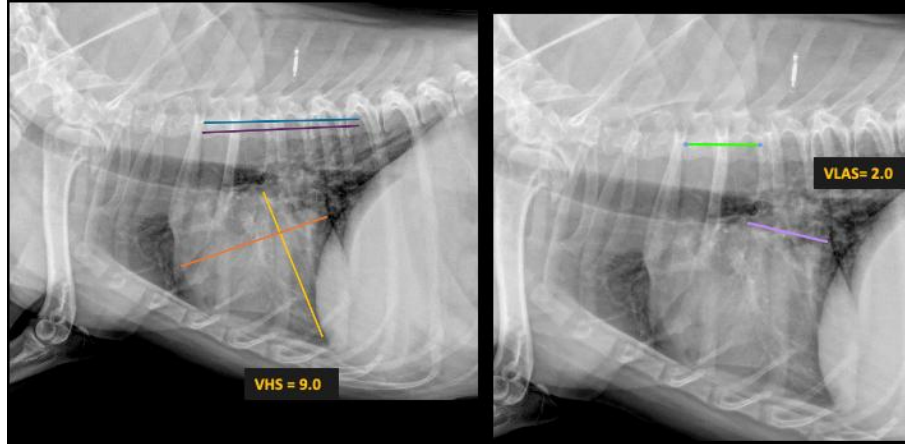
INVOICE

74982

DATE

5-13-26

Fig. 3. VHS and VLAS measurements



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
info@sonopath.com