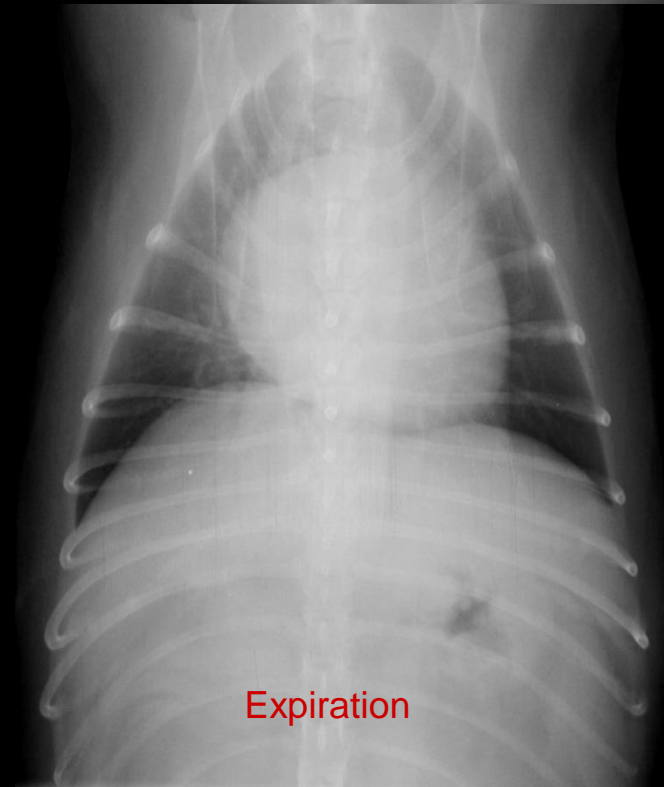


Inspiration



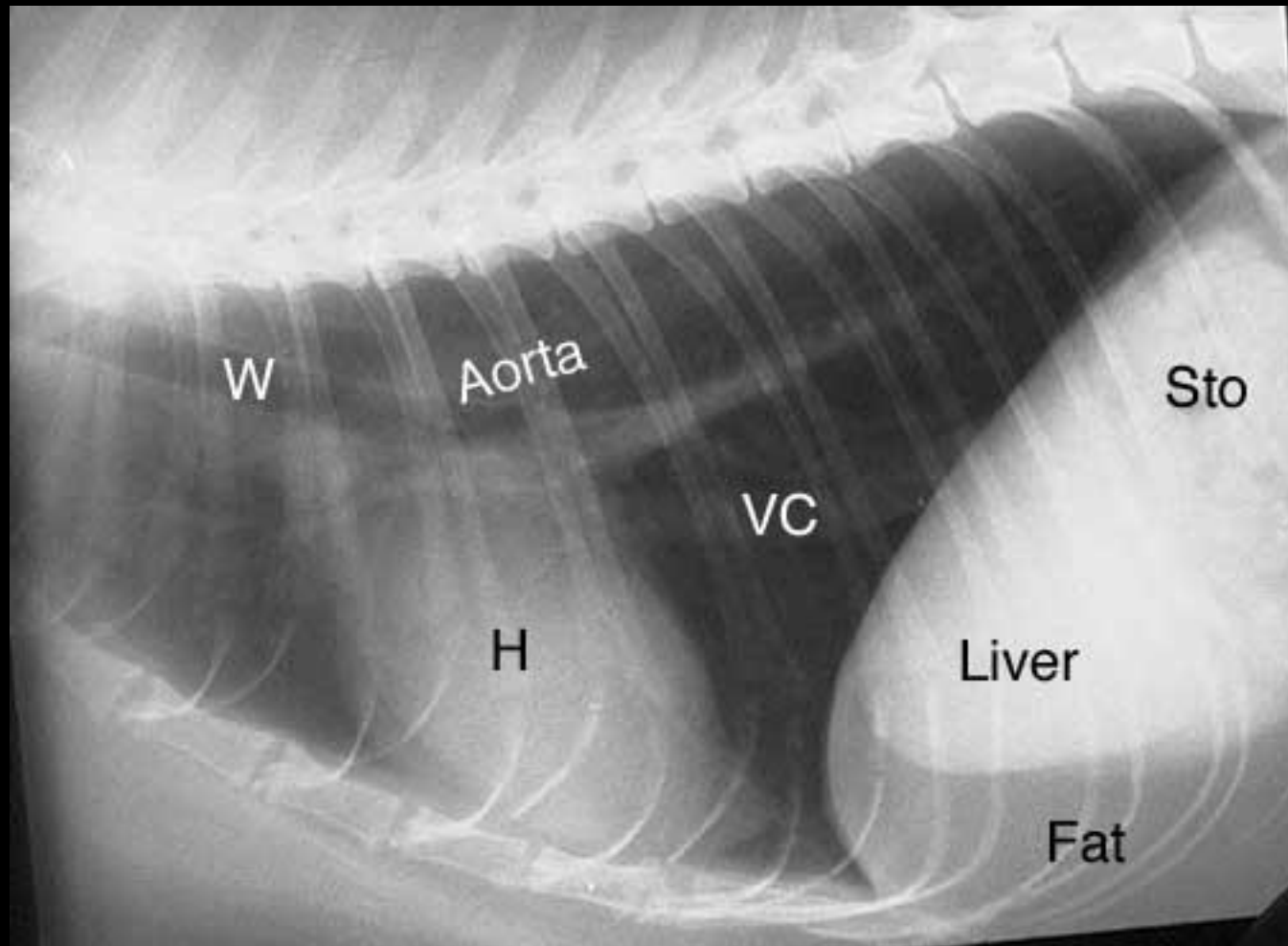
Expiration

Radiographic Position

In order to evaluate the lungs radiographically they should be granted in 4 positions. (right and left L/L, V/D, D/V)

- On lateral radiography; the caudodorsal border of the lungs is caudal of the 12th thoracic vertebrae. In this position the ventilation of the accessory lobe is observed. The heart and the diaphragm are distinguished in this position.





W

Aorta

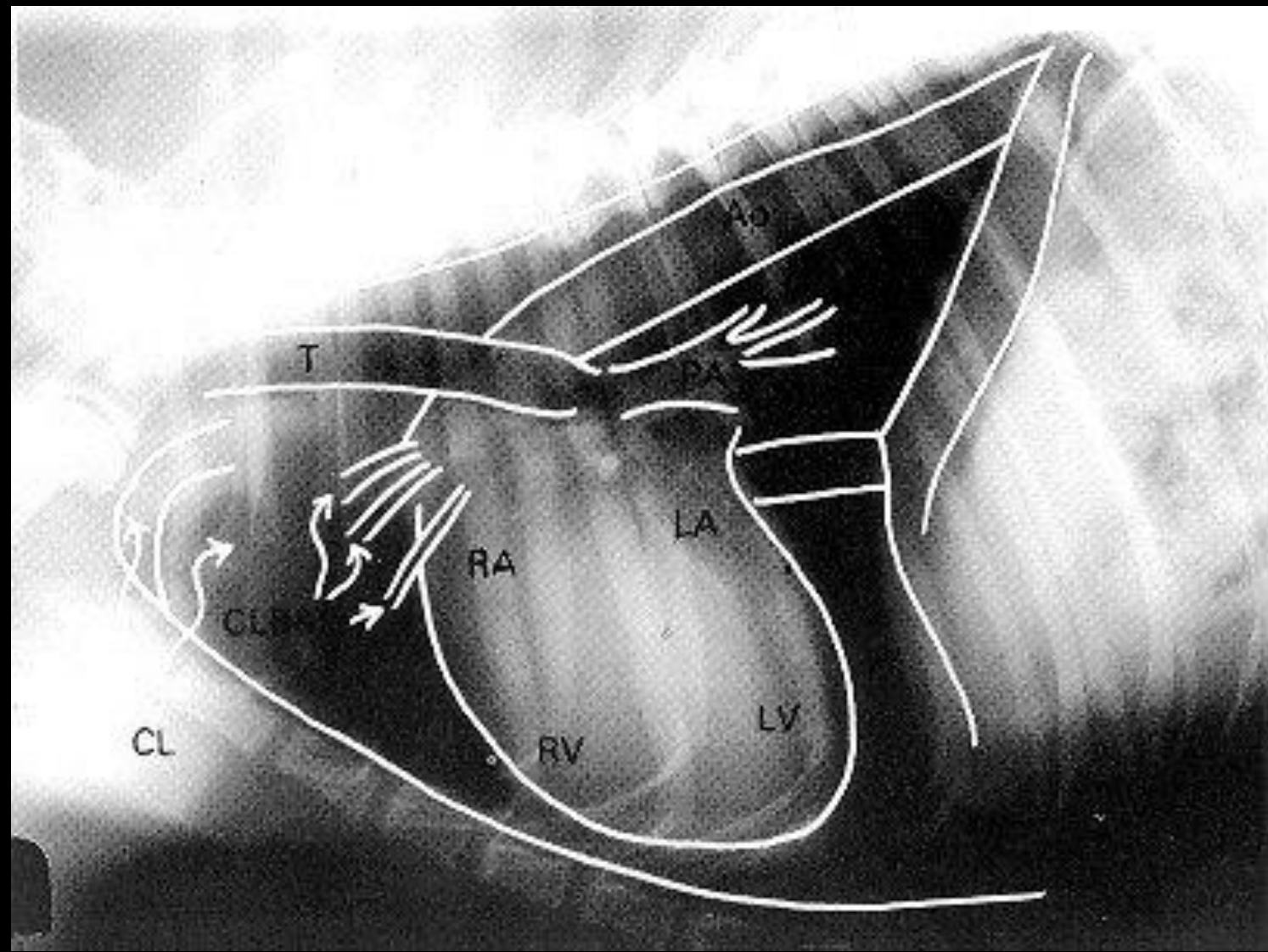
Sto

VC

H

Liver

Fat

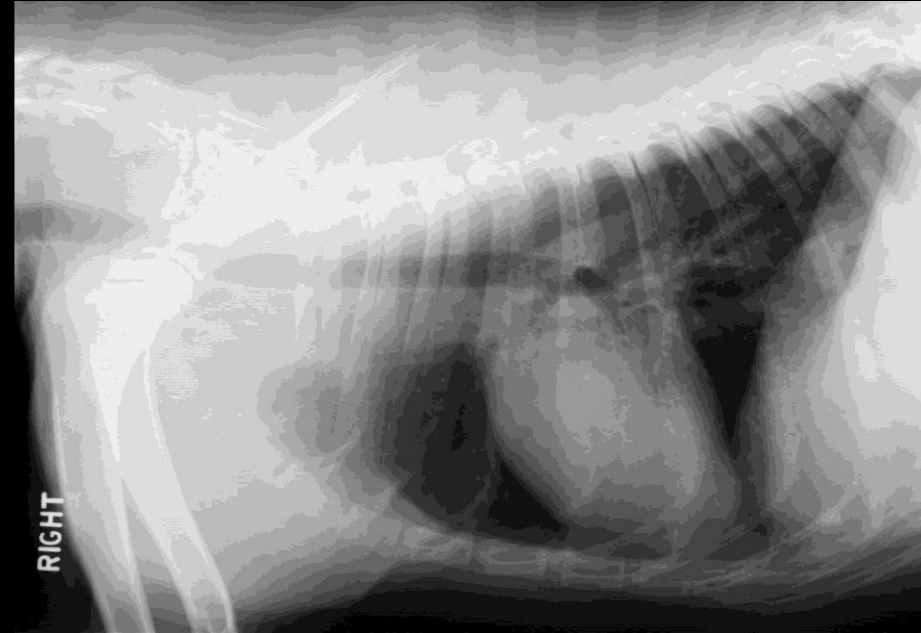


- In the **right** L/L position, mostly **left** lung lobes lesions are evaluated
- In the **left** L/L position, mostly **right** lung lobes lesions are evaluated.

- This position is particularly appropriate in cases of pneumonia.

Right L/L position

- The cardiac detail
- Left part of the lungs
- The entrance of the Vena cava



Left L/L position

- Heart appears round
- Right part of the lungs
- The passage of Vena cava

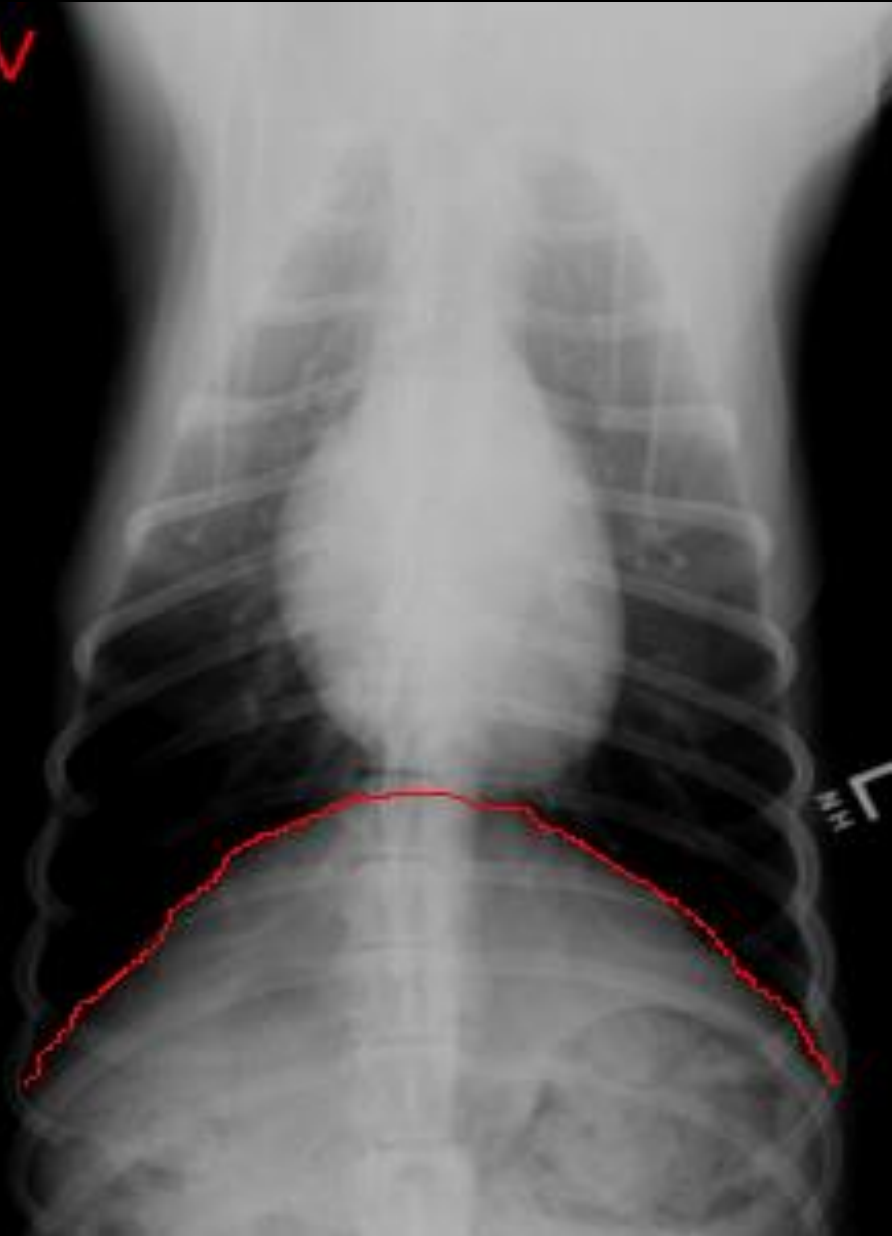
Note:

If shooting is in the right L/L position, the right mark (R) should be placed on the front side

Dorso – Ventral Position

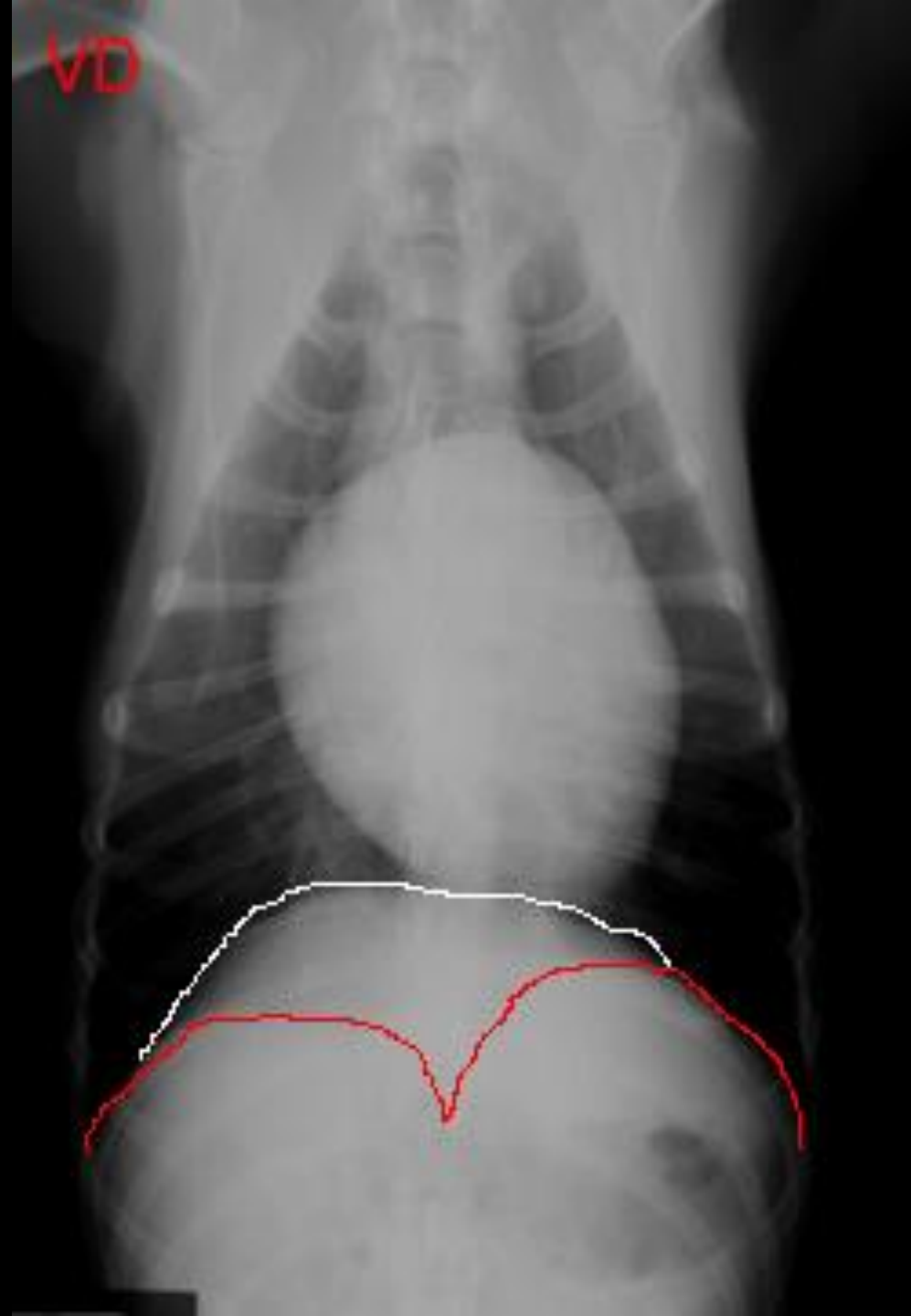
- Less stressful for animal
- The appearance of heart is good
- The diaphragm is rounded
- Caudal pulmoner veins are seen better
- Small amounts of pleural air are seen better
- Lateral lobes are seen better

DV



Ventro – Dorsal Position

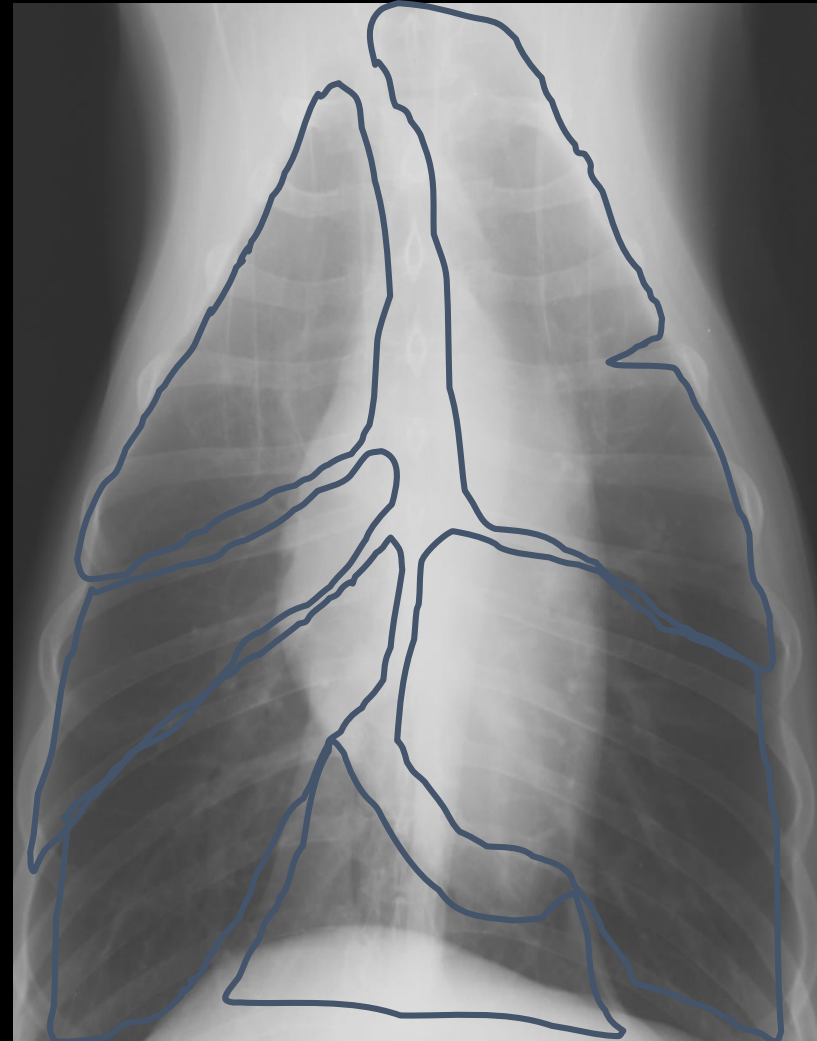
- The appearance of the lungs is good
- Heart is seen long
- Diaphragm is flattened
- Small amount of pleural fluid is seen better



Normal Radiographic Anatomy of the Lungs

- Left lobe
 - Cranial lobes
 - Caudal
- Right Lobe
 - Cranial
 - Medium
 - Caudal

* ACCESSOR



Radiographic Examination of the Lungs

- Direct Radiographic examination
- Indirect Radiographic examination

Bronchography; It is used for diagnosis, prevalence and type of bronsiectasia

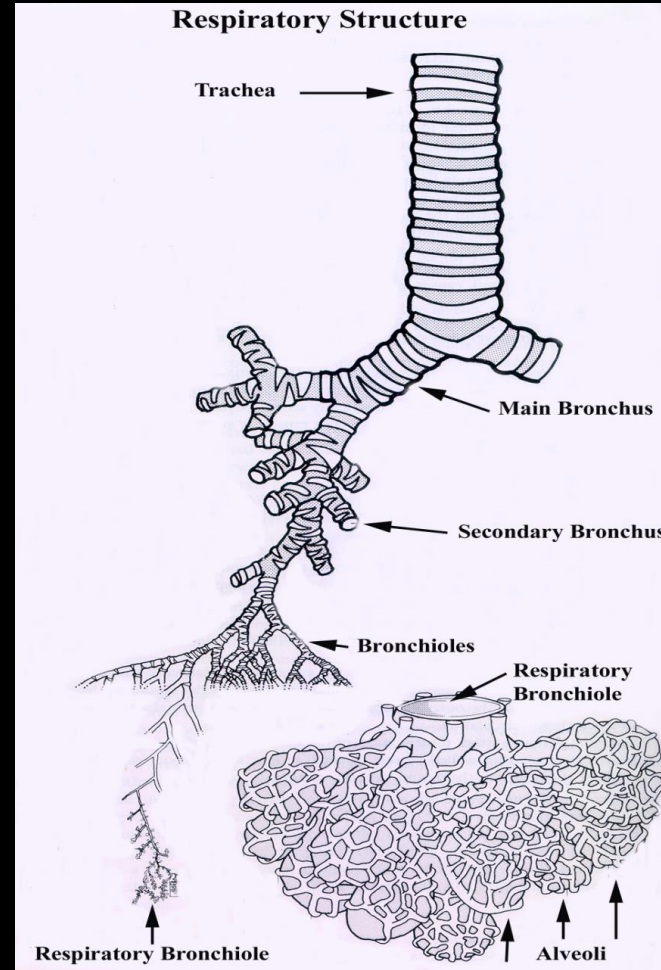
Pulmoner angiography; It is used in the evaluation of pulmonary embolism and congenital pulmonary vascular anomalies.

Lung diseases radiographically are divided into four groups

1. Diffuse lung diseases causing increased opacity
2. Pulmonary diseases causing decreased opacity
3. Pulmonary masses
4. Calcified lung lesions

A- Diffuse lung diseases causing increased opacity

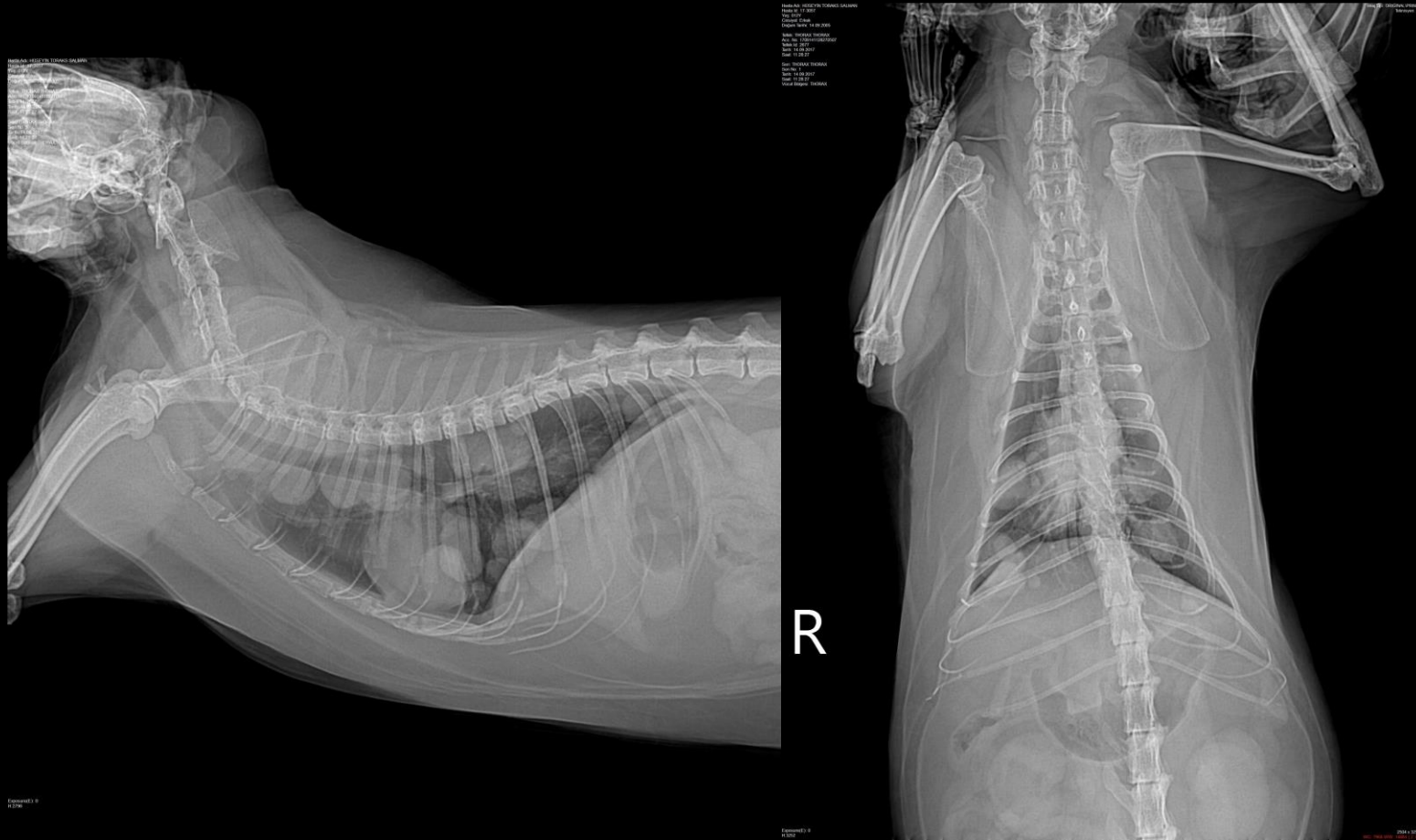
- vascular
- interstitial
- bronchial
- alveolar structures



The increase in opacity depends on the increase in density due to the absorption of radiolucent parts in the normal lung tissue and the removal of solid structures that absorb x-rays. As these parts will hold more of the x-rays, the film will be less exposed to x rays and will appear lighter than other regions.

This is seen in neoplastic and hemorrhagic diseases.

Pulmonary masses



B. Lung diseases causing reduction of opacity (Hyperlusensy)

Hyperlusensy is general or local radiolucency increase in the lungs. Due to decreased lung opacity, the ventral margin of the heart, diaphragm and thoracic vertebrae are evident.

The differential diagnosis of Hyperlusensy is depends onto it being diffuse or local.

* A diffuse lung Hyperlusensy may occur due to high dosing or over ventilation in anaesthesia.

MEDIASTINUM

Mediastinum is the portion between the two pleural sacs.

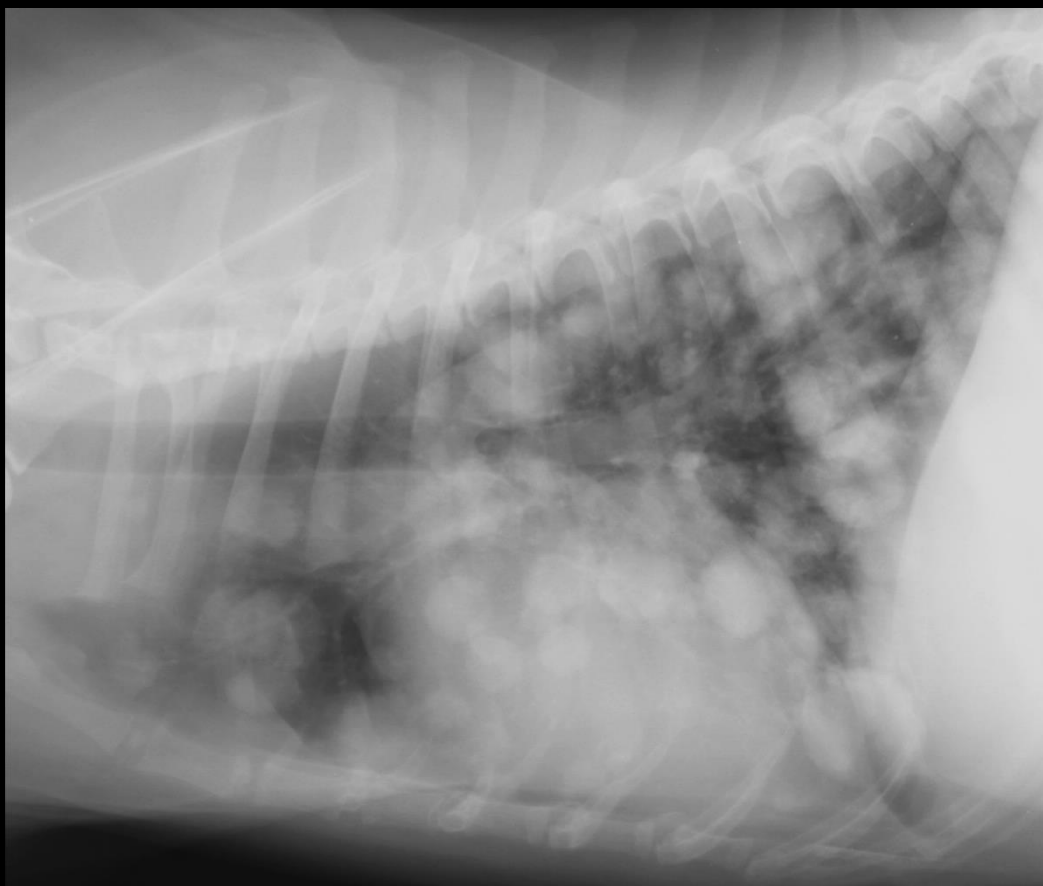
* cranial

** medial

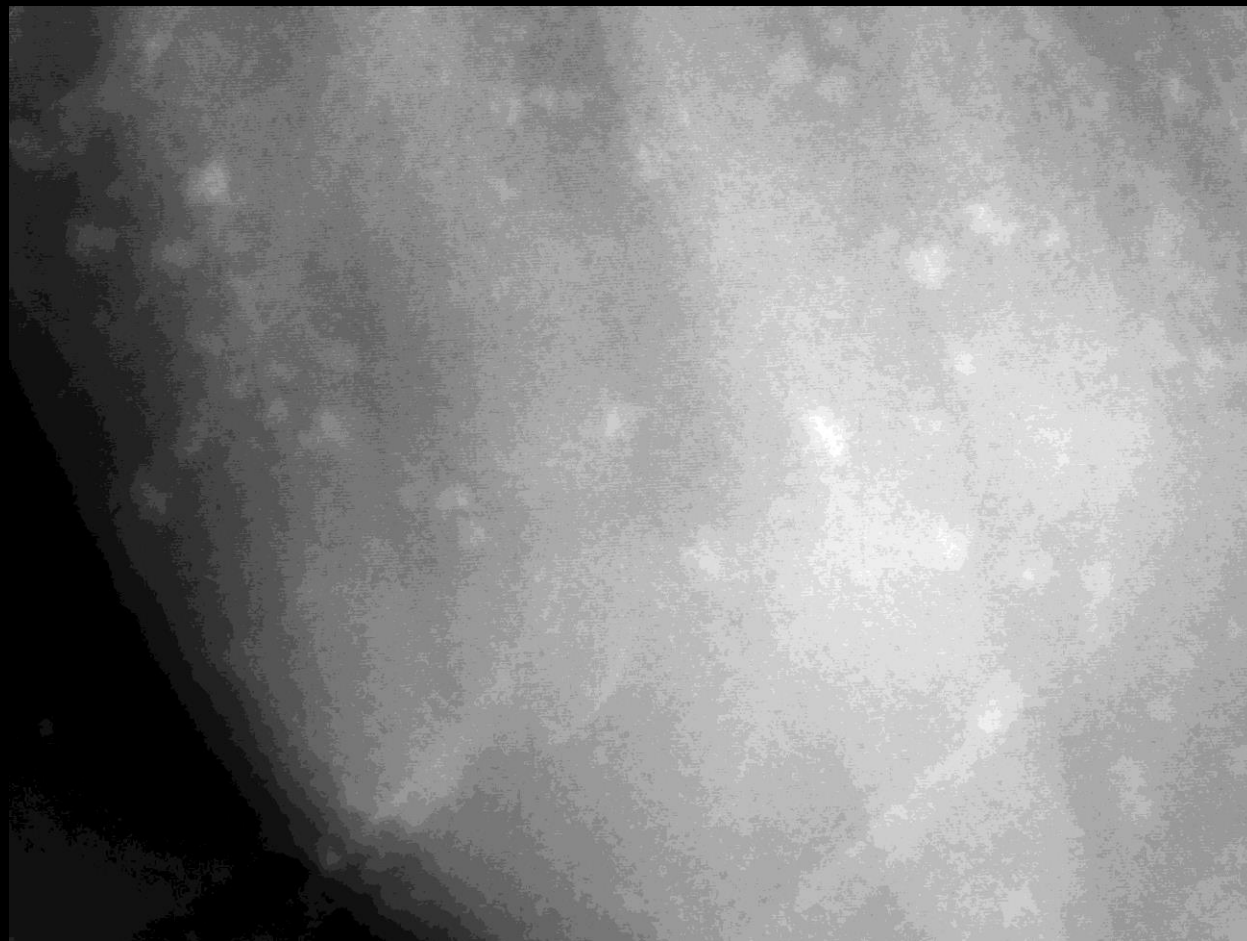
*** caudally divided and in these sections there are many mediastinal organs.

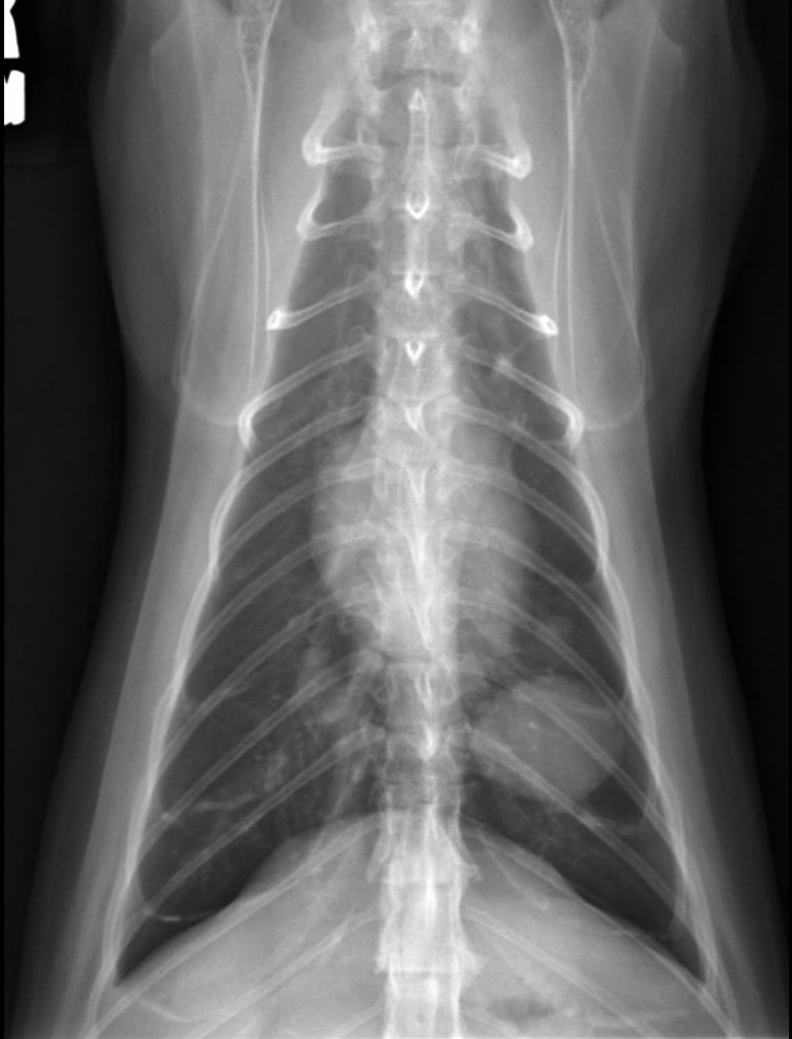
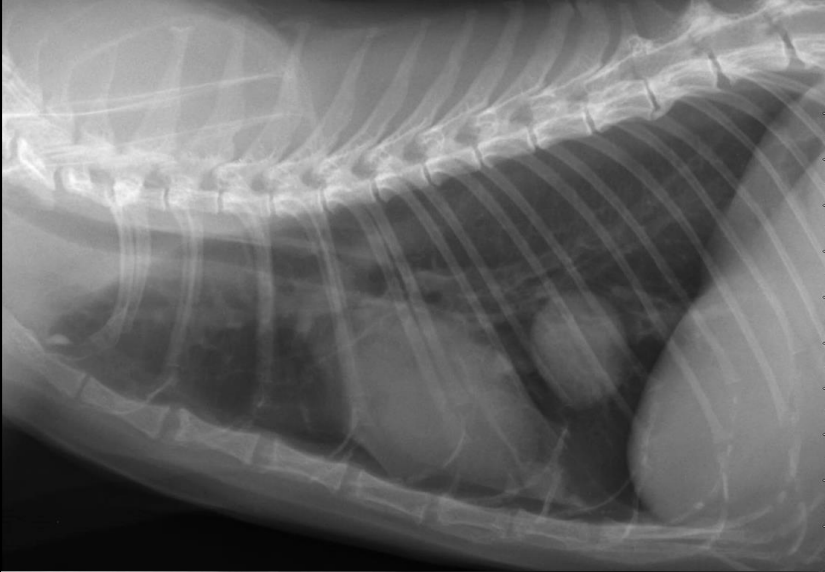
Pathological conditions of mediastinum are collected under 4 general headings

- Mediastinal displacement
- Mediastinal masses
- Mediastinal fluid
- Pneumomediastinum



Pulmonary Osteoma

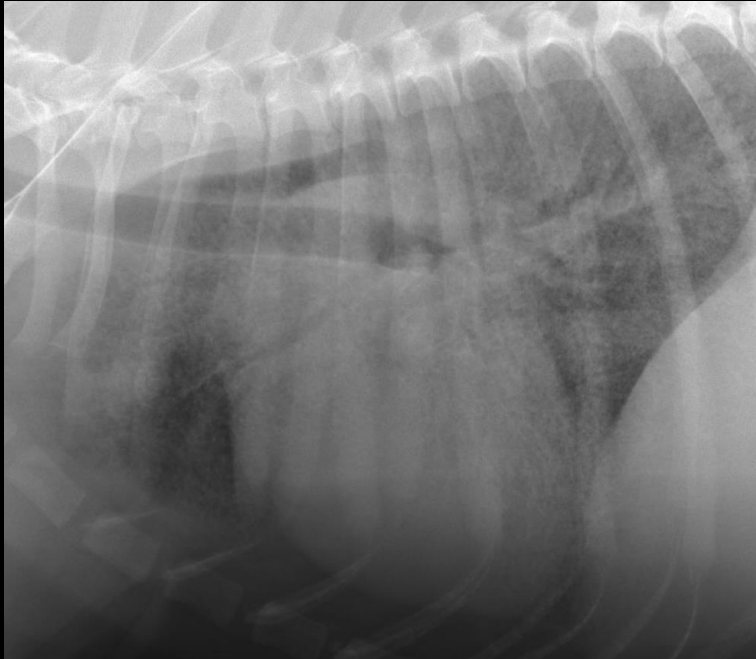




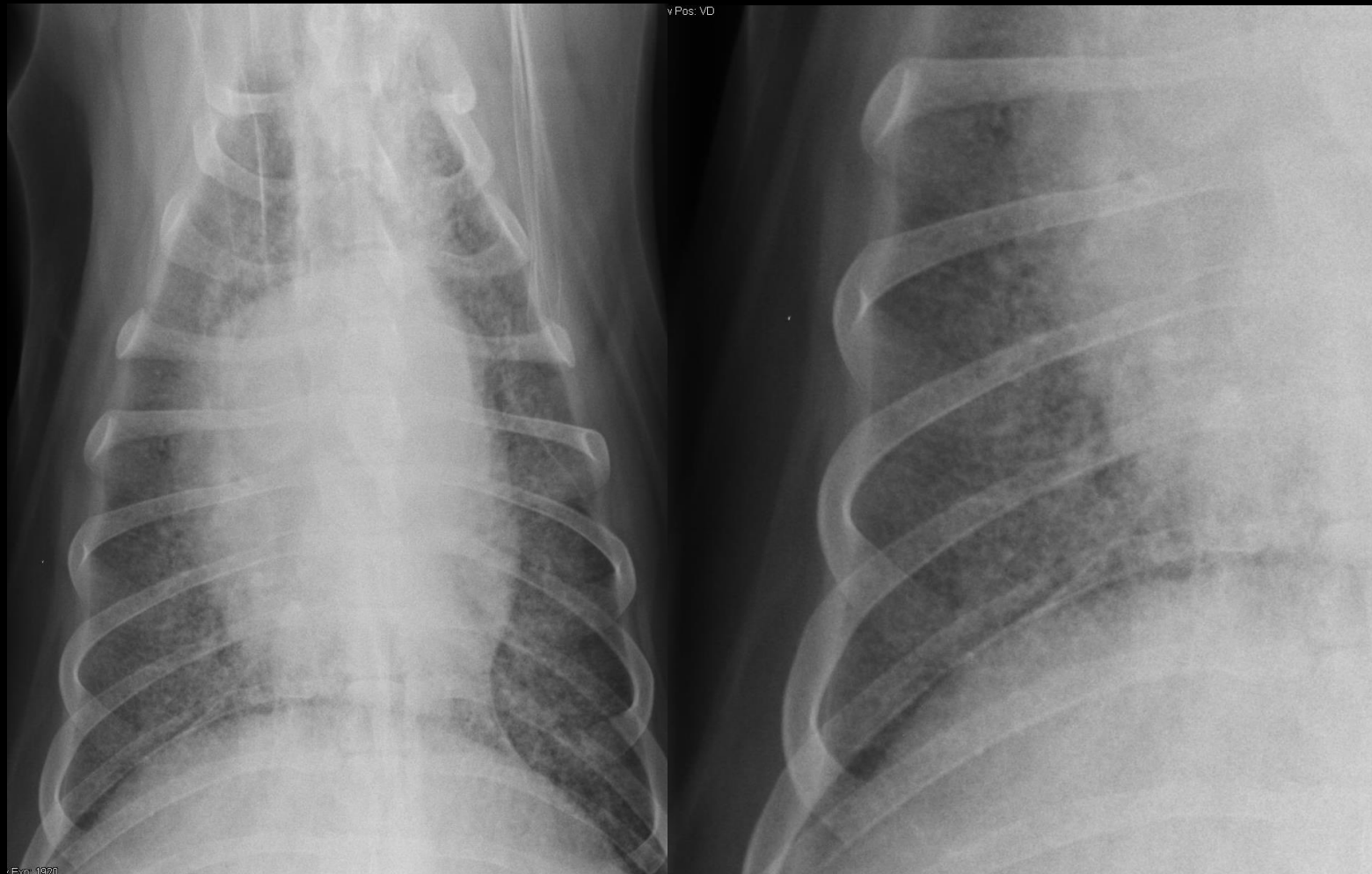
Cavitary pulmonary nodular lesions



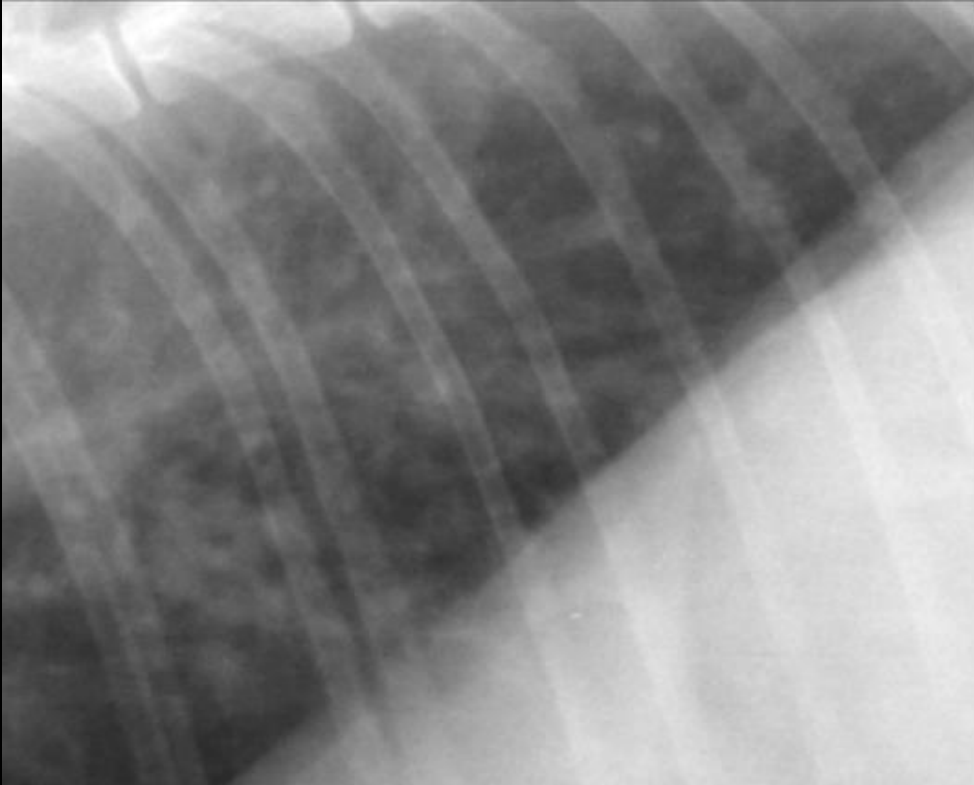
Milier interstitial pattern



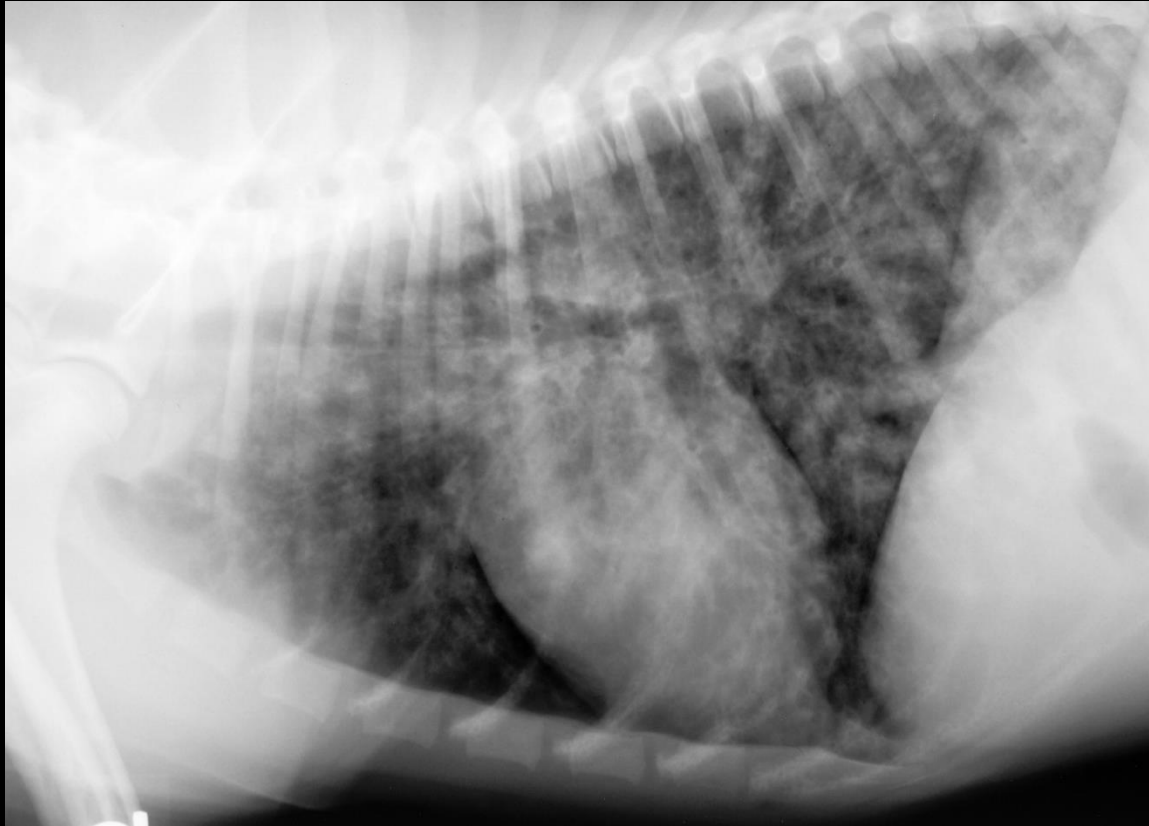
Milier interstitial pattern

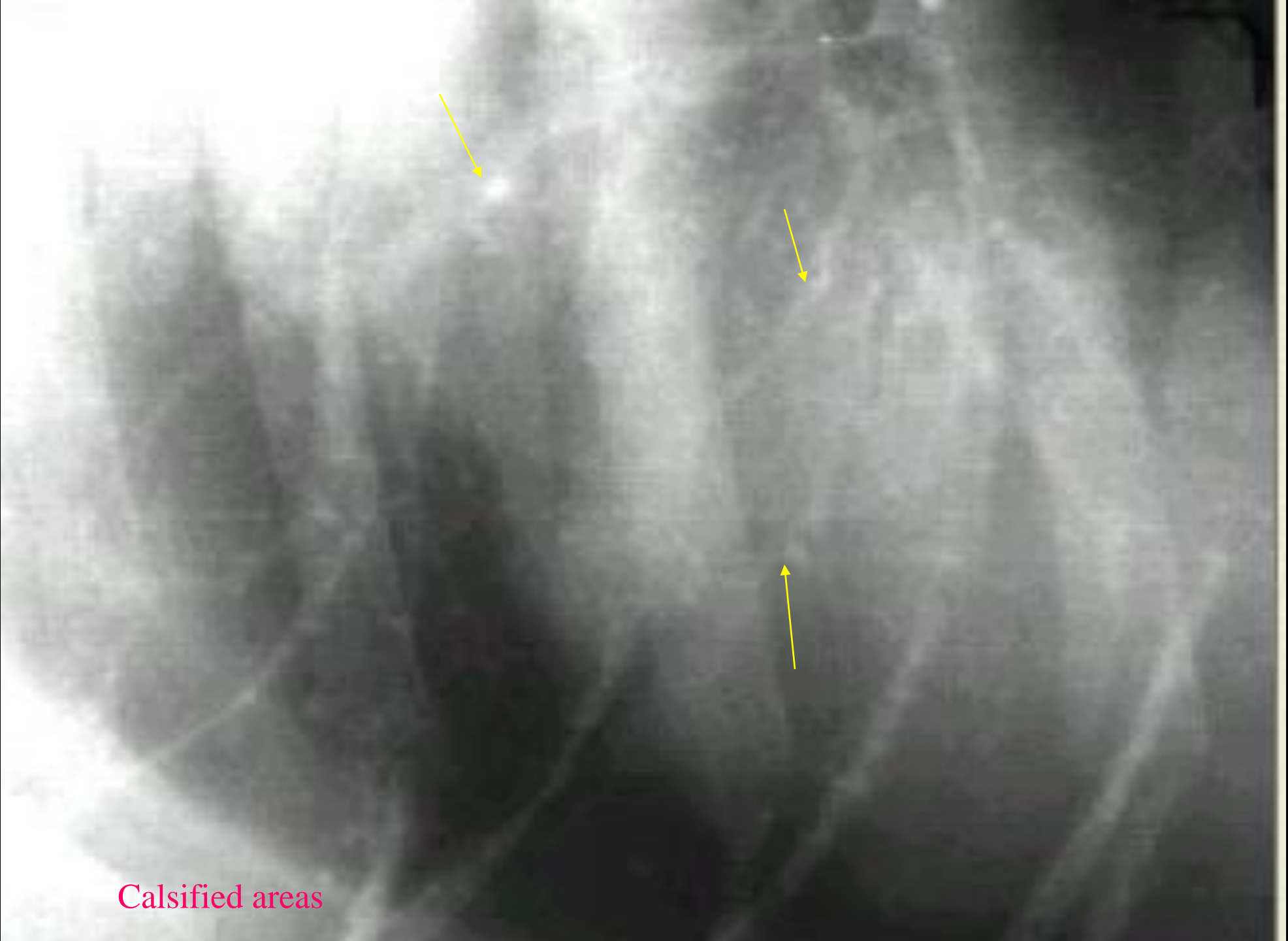


Bronchial Pattern

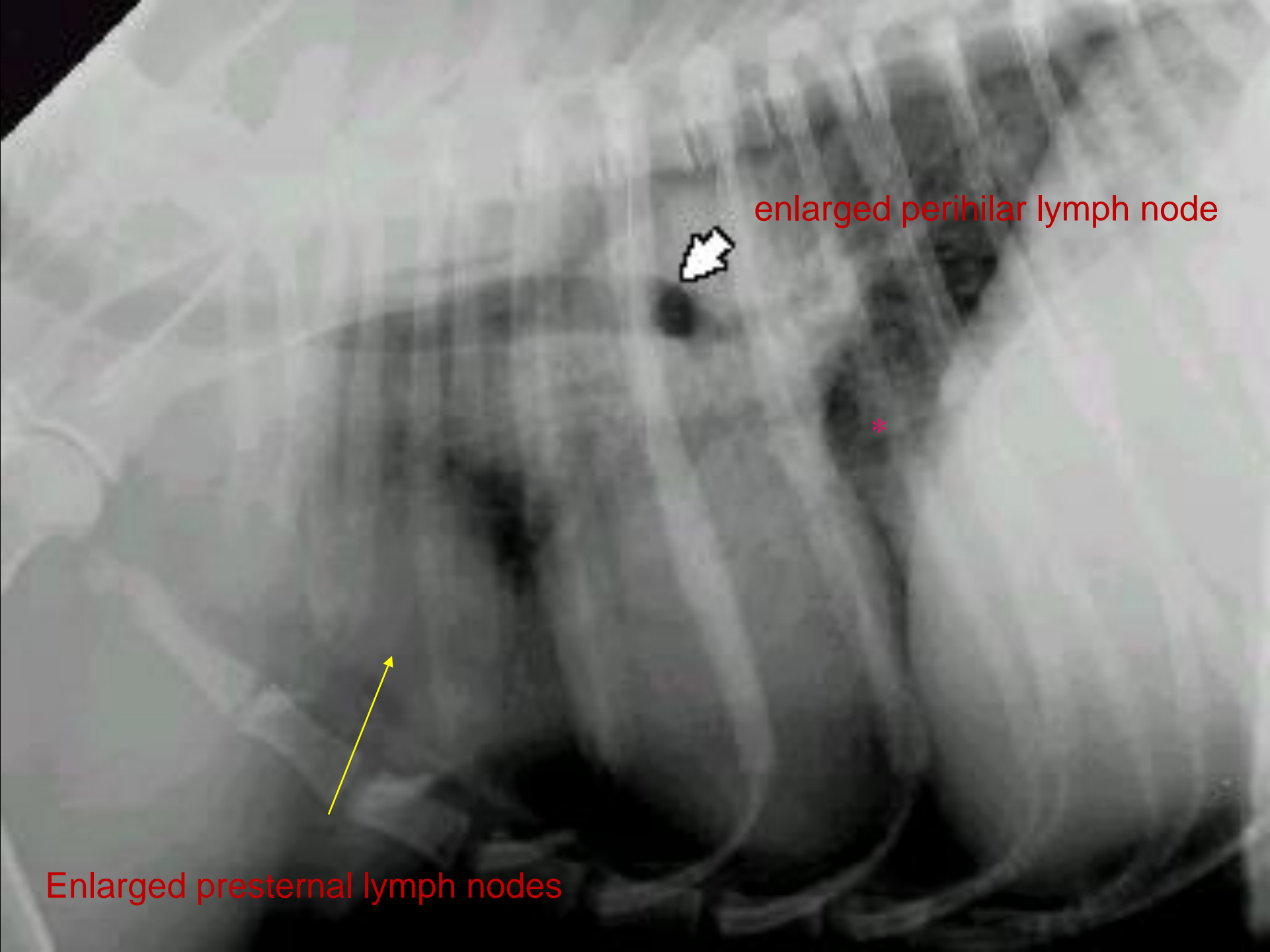


Severe chronic bronchitis





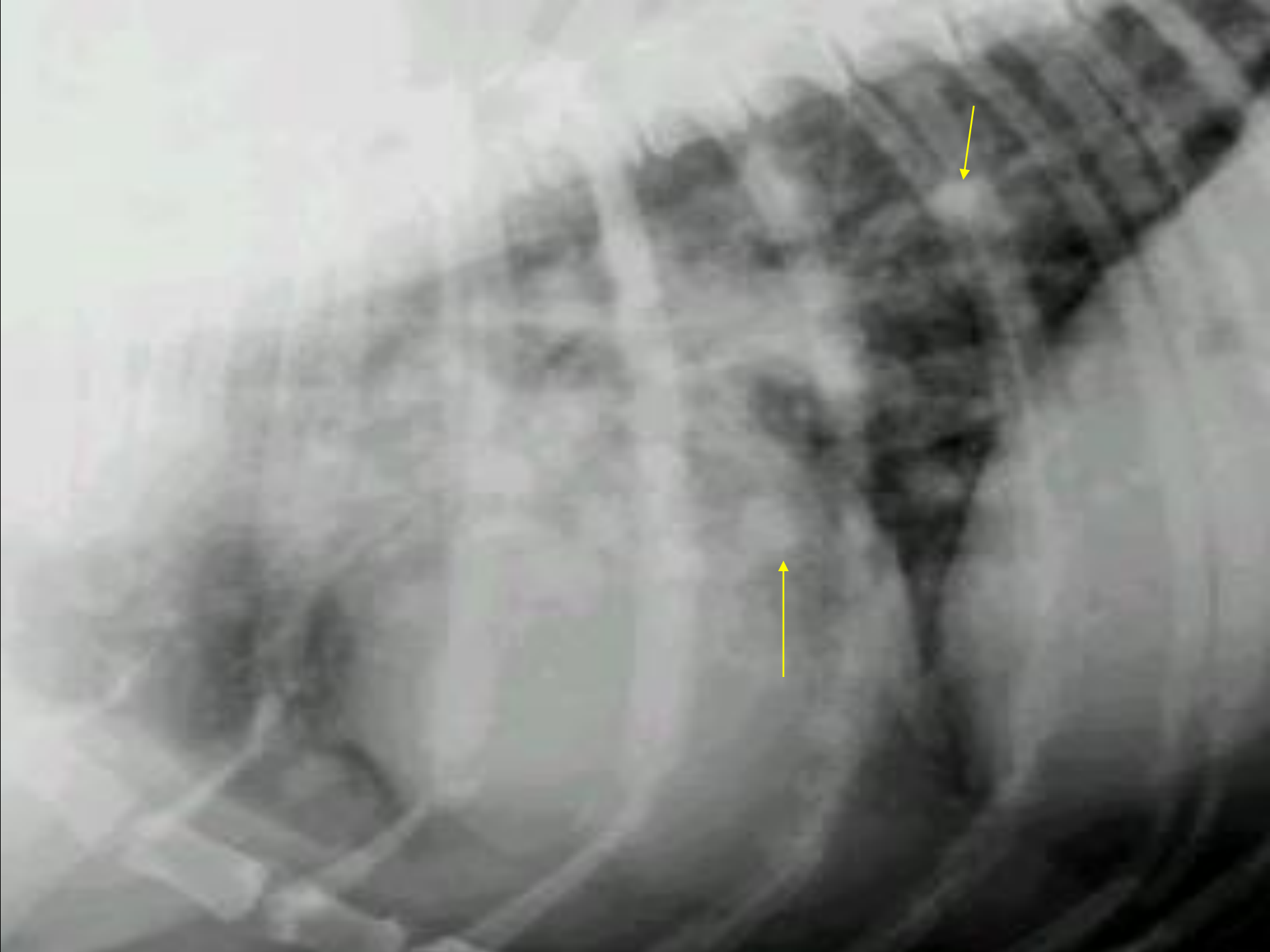
Calsified areas

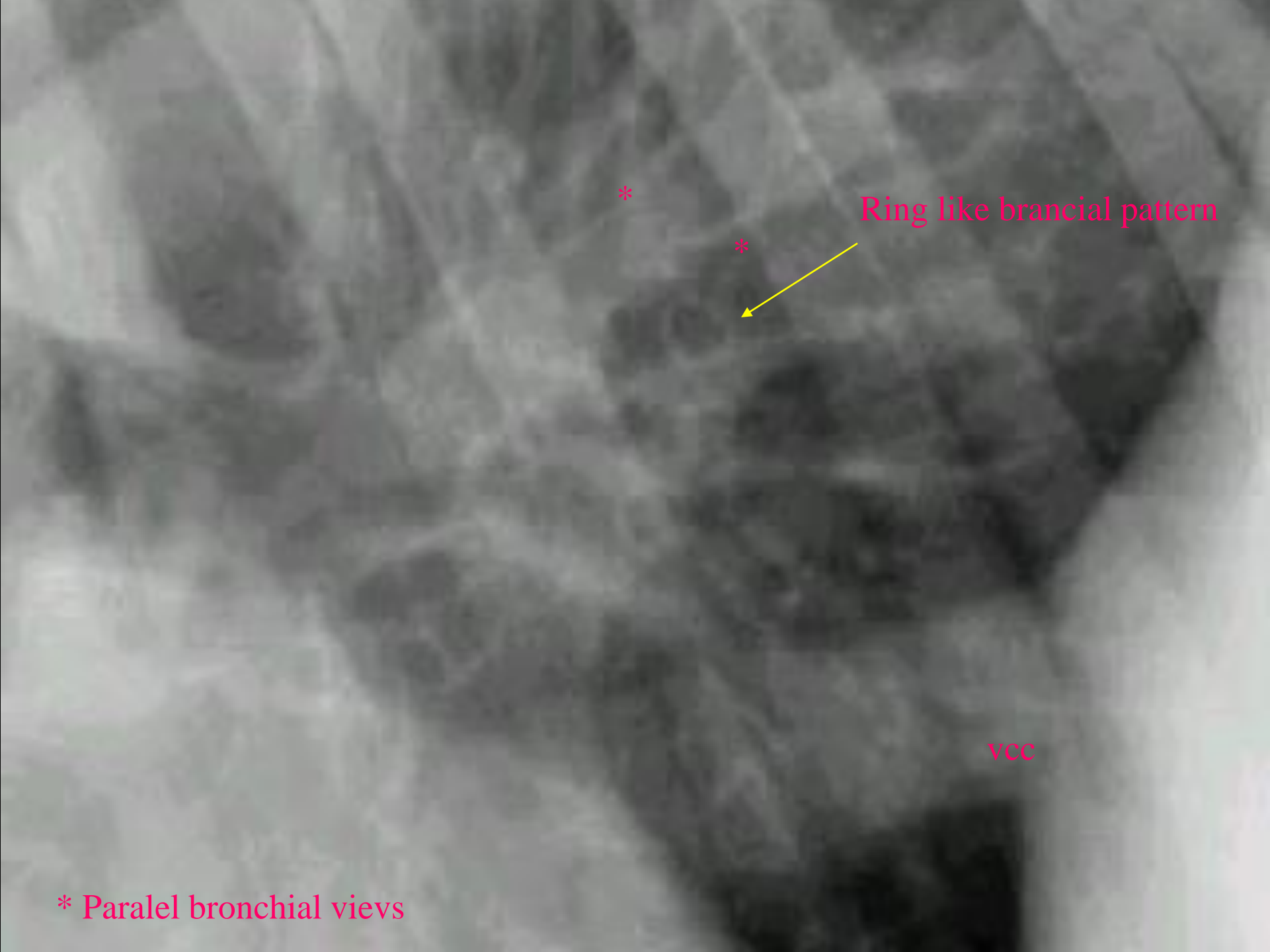


enlarged perihilar lymph node

Enlarged presternal lymph nodes







Ring like brancial pattern

*

*

vcc

* Paralel bronchial views

R

