

IT'S YOUR CASE

Species: Feline Breed: Maine Coon Sex: Male Neutered Age: 11 years

Clinical History:

An 11 yo MN Maine Coon cat has a history of chronic mild respiratory issues. The patient presented today for increased respiratory rate and effort, occasional open-mouth breathing and cough. He is still eating fairly well though perhaps mild decreased interest in food in the mornings. The patient exhibited mild cyanosis while taking radiographs and butorphanol was given before completing the exam. Lung sounds are harsh and there are also referred upper airway sounds auscultated.

Details of study and technical comments:

Right lateral and ventrodorsal views of the thorax are available for review. The images are of diagnostic quality.

Diagnostic interpretation:

THORAX:

The diaphragm is intact but flattened on the lateral view (red arrow). The intrathoracic volume is expanded, evidenced by caudodorsal extension of the lung field up to the caudal aspect of L1 (orange arrows).

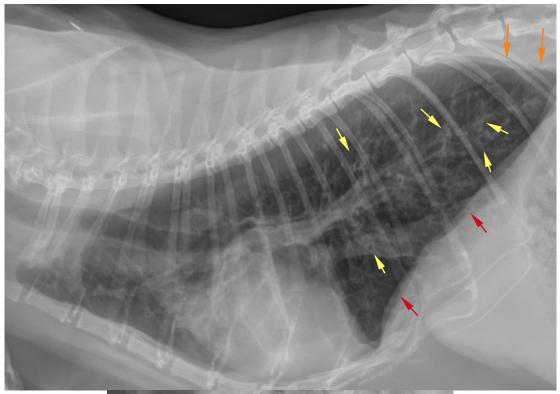
There is a moderate diffuse bronchial pattern (yellow arrows).

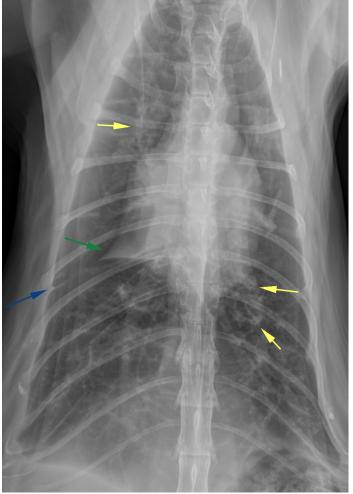
There is a triangular soft tissue opacity in the right hemithorax (green arrow) at the level of the right middle lung lobe, which is not well differentiated on the right lateral view; this could be best seen on a left lateral view. A thin pleural fissure line is present (blue arrow).

The patient has a mildly increased body habitus. The cardiac silhouette is normal in size and position; there is no specific chamber enlargement. There is pericardial fat that decreases the sharpness of the soft tissue margins of the cardiac silhouette. The trachea and mainstem bronchi are patent. The mediastinum is unremarkable.

The thoracic vertebral column is unremarkable without evidence of fracture, luxation or osteolysis. Multifocal spondylosis deformans is present.









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Conclusions:

- Diffuse bronchial pattern with hyperinflation. This is consistent with an acute crisis of a chronic lower airway disease (e.g. feline asthma) might be considered most likely. Infectious aetiologies (i.e. parasitic, viral, bacterial or fungal) are considered less likely.
- Triangular soft tissue opacity right hemithorax. Primary differential is atelectasis of the right middle lung lobe secondary to obstruction of the main bronchus (e.g. secondary to the chronic lower airway disease) most likely.

Additional comments:

The bronchial changes are well defined and likely chronic. Commonly with feline asthma, there may be reduced mucus clearance. The combination of right lateral recumbency and mucus plugging can result in the described changes of the right middle lung lobe. Bronchopneumonia cannot be entirely excluded. Following recovery in sternal position and breathing of room air, a repeated ventrodorsal view may show vast improvement and confirm atelectasis.

Hyperinflation, evidenced by diaphragmatic flattening, is suggestive of air trapping. In asthmatics, this is associated with crisis and bronchospasm.

A bronchoalveolar lavage could be considered for further evaluation, if clinically indicated.

