

WHAT IS YOUR DIAGNOSIS

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Signalment

A 7-month-old male Golden Retriever

History

The dog has been dysphagia for a month. Neck swelling was obviously seen. Extended neck was observed during drinking water. Mild weight loss was noticed. The dog likes playing and biting wood stick.

Clinical Examination

The dog was in pain during palpation. Large firm mass was detected along the cervical area. There was no skin wound after skin shaving.

Radiographic Examination

Lateral cervical radiograph was taken to evaluate any abnormal mass along cervical area. Then, esophagograph was taken immediately after 30%W/V barium sulfate suspension administration for further investigation of esophagus if there is any dysfunction related to cervical mass.



Figure 1 Plain lateral cervical radiograph

Figure 2 Esophagograph after immediate barium sulfate suspension administration

Give your diagnosis and turn to the next page.

Radiographic findings

Plain lateral cervical radiograph (Fig 1) showed ventral displacement of trachea due to a mixed opacity occupied structure. Small radiolucent pockets were diffusely detected inside this lesion (Fig 3, 4). There was an irregularity of the cranioventral surface of the 5th cervical spine. Fistula tract, appearing radiolucent, could not be detected. Positive contrast esophagograph (Fig 2) revealed normal filling of barium sulfate in cervical esophagus and upper esophageal sphincter. There was no evidence of leakage contrast from esophageal lumen. Computed tomography (CT) was later performed to rule out small radiolucent foreign body and periosteal bone reaction of the 5th cervical spine. Foreign material was not found via CT image (Fig 4). Ventral periosteal bone surface of 5th cervical spine was normal. Large cavitory lesions with thickened and irregular capsule filled with hypodensity material and air pocket laterally displaced esophagus and trachea.

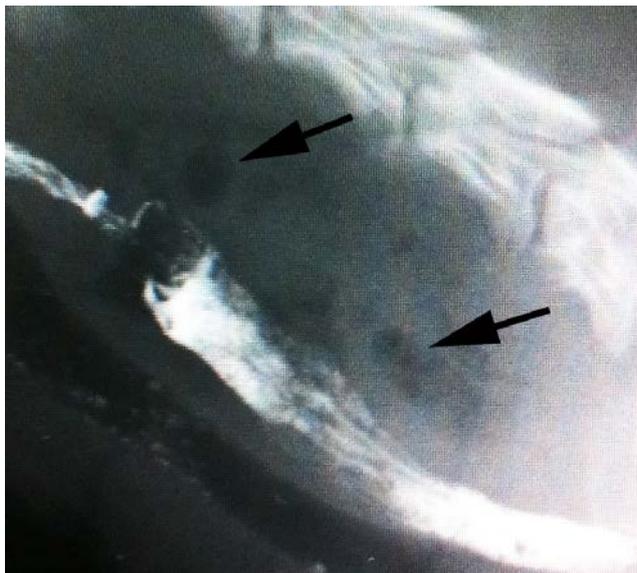


Figure 3 Radiolucent pockets fill in space occupying lesion (black arrows).

Radiographic diagnosis

Cervical abscess due to pharyngolaryngeal trauma was the most likely lesion

Discussion

Pharyngolaryngeal trauma can commonly occur from a penetrating wound of upper respiratory tract or esophagus. Foreign material injury, external wound penetration, bite wound or gunshot, can be the cause of trauma. Soft tissue swelling or mass lesion could be found associated with hematoma, cellulitis, myositis and/or trauma. Emphysema or gas opacity accumulation appearance may indicate abscess which is mostly detected in dog with oropharyngeal stick injury and then extend to mediastinitis, pneumomediastinum, pneumothorax and pleural effusion. Oblique radiograph can be useful to evaluate surrounding bone involvement. In case of small material, radiolucent materials or fistula tract that cannot be detected from radiograph, CT is beneficial for further investigation.

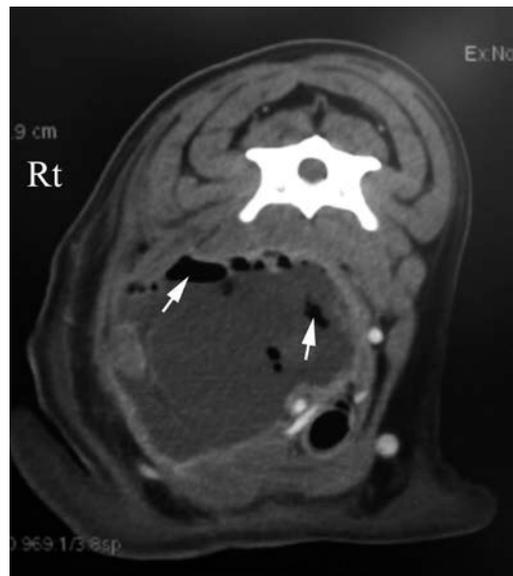


Figure 4 CT image revealing air pockets distribution in the lesion (white arrows).

Reference

Alexander K 2013. The Pharynx, Larynx, and Trachea. In: Textbook of Veterinary Diagnostic Radiology. 6th ed. Elsevier Saunder Company. Missouri. 489-499.