Radiographic and 3-D CT Findings of Hyoid Apparatus Abnormalities in a Poodle Dog

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The hyoid bones are usually symmetric and uniformly mineralized. They may be fractured or dislocated in association with laryngeal trauma but hyoid bone abnormalities are rare. In this case, we revealed that a Poodle dog with dysphagia had hyoid apparatus abnormality. To supplement the scant literature concerning hyoid bone abnormalities in a dog, a review of the anatomy and the usefulness of 3-D CT for diagnosis was provided.

A 5-year-old intact female Poodle dog with a history of cough, persistent regurgitation and dysphagia for more than 4 years was referred to the Animal Medical Center of Chonbuk National University. The patient showed exaggerated swallowing movement. Plain radiography and contrast study were performed to localize the lesion. CT scanning was performed to identify anatomical structures in detail.

On the radiograph, aspiration pneumonia and the hyoid apparatus abnormalities were suspected. Contrast medium stayed in near the roof of nasopharynx on contrast study with liquid barium and paste. The hyoid apparatus abnormalities were evident on reconstructed 3-D CT images. We found the fact that one of the hyoid bones was defect and stylohyoid and epihyoid bones were arranged asymmetrically on the left side.

This report describes hyoid apparatus abnormalities which are rare. 3-D CT could be useful to diagnose the structure that is hard to identify by radiography only.

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