

## Imaging Features of Nasopharyngeal Transitional Carcinoma in a Cat

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**Signalment:** A 5-year-old, castrated male Siamese cat was referred because of partial anorexia, vomiting, diarrhea and ataxia. The cat had a history of treatment for serous discharge through an ear canal a month ago.

**Results:** On physical examination, this cat showed open mouth breathing and had normal blood profiles. Two soft tissue opacity masses with amorphous calcification near tympanic bullae and dorsal nasopharynx were identified on radiography. In addition, a round nodule was also found in the cranial lung field. On computed tomography, it was identified as a large heterogeneously enhanced mass that was severely destructive and extended to the hard and soft palates and adjacent bony structures. This mass invades adjacent cranial cavity. Two days after, the cat showed seizure, intermittent apnea, incoordination of movement between the forelimb and hind limb and disruption of blinking. After all, the cat was euthanized and a nasopharyngeal transitional carcinoma was found on histopathological examination.

**Clinical relevance:** Nasopharyngeal transitional carcinoma is a rare neoplasm in cats and this is the first report in Korea. It needs physical examination, neurological examination, serologic test, diagnostic image and biopsy to diagnose. In this case, although just soft tissue opacity at the retropharyngeal region was identified in plain radiography, computed tomography (CT) and reformatted multiplanar images showed extensive and destructive bony changes and invasiveness to the cranium. Through CT examination and clinical signs, we could obtain evaluation of prognosis and future plan.

**Keywords:** nasopharyngeal transitional carcinoma, cat, radiography, computed tomography

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