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Oropharyngeal pleomorphic adenoma causing complete airway obstruction and cardiopulmonary arrest

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The patient, an 85-year-old Japanese woman who was residing in a nursing home, had been diagnosed with a pleomorphic adenoma of the hard palate. She had stopped visiting an outpatient clinic because the adenoma, though enlarging, was asymptomatic. Three days after onset of an upper respiratory tract infection, she developed stridor and difficulty breathing and had a cardiopulmonary arrest. Chest compressions and manual bag ventilation were immediately initiated by in-house nurses, restoring spontaneous circulation. On admission to a hospital, she was found to have a huge elastic mass in her oropharyngeal space (Fig. 1a, arrow). A Cormack grade 3 view was achieved on direct laryngoscopy by an experienced emergency physician; however, endotracheal intubation was not successful. Repeat laryngoscopy with a video laryngoscope (Airway Scope®, Hoya, Tokyo, Japan) provided a Cormack grade 1 view, enabling intubation of her trachea with a 7.0-mm endotracheal tube. Computed tomography scan revealed a homogeneous mass (5.4 × 5.0 × 3.5 cm) compressing the oropharyngeal space (Fig. 1b, arrow). After undergoing a tracheostomy, the patient was transferred to a rehabilitation hospital with no neurological sequelae. Excision of the tumor was postponed until her performance status had been improved through rehabilitation.

Pleomorphic adenoma is a common salivary gland tumor, accounting for ~60% of all salivary gland neoplasms [1]. Clinical manifestations include dysphagia [2], hoarseness [3] and obstructive sleep apnea [4]. However, these lesions may be asymptomatic, such as in this patient. Airway obstruction caused by a pleomorphic adenoma is extremely rare [5, 6] and, to our knowledge, there are no reports of associated cardiopulmonary arrest. This case illustrates two important points. First, even an asymptomatic pleomorphic adenoma can cause complete airway obstruction when superimposed on

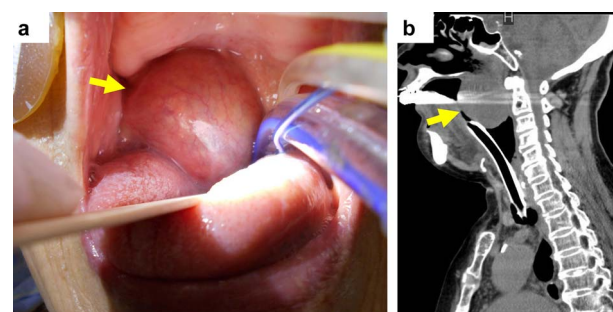


Figure 1. (a) Photograph showing a huge elastic mass occupying the oropharyngeal space (arrow). (b) Sagittal computed tomography image showing a large homogeneous mass (5.4 × 5.0 × 3.5 cm.) compressing the oropharyngeal space (arrow).

upper respiratory infection. Thus, even if asymptomatic, early excision may be warranted for large pleomorphic adenomas. Second, video laryngoscopy can facilitate endotracheal intubation in patients with large tumors occupying the oropharyngeal space.

CONFLICT OF INTEREST STATEMENT

The authors have no conflicts of interest to disclose.

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ETHICAL APPROVAL

No ethical approval was required.

CONSENT

The patient gave written informed consent to publication of details of her case.

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GUARANTOR

Yuko Ono is the guarantor for this publication.

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