

Letter to the Editor

Aryepiglottic fold cyst causing obstructive sleep apnea syndrome

Tumour of the larynx represents an unusual cause of airway obstruction and obstructive sleep apnoea syndrome (OSAS).

We describe a case of laryngeal cyst localised at the level of aryepiglottic fold, causing OSAS. A 30-year-old man presented with a clinical history (e.g. snoring and daytime sleepiness) suggestive of progressive OSAS. Nasal morphology, rino- and oropharyngeal mucosa were normal, while indirect laryngoscopy, fibre optic nasopharyngolaryngoscopy and computed tomography scan showed a regular mass containing fluid and arising from the left aryepiglottic fold and reaching the epiglottis and ipsilateral ventricular fold. Airway obstruction was observed during inspiration and in the supine position, when the mass pulled the epiglottis down and backward, causing a complete airway obstruction. When the patient was standing, sitting or lying in the prone position, the mass did not cause obstruction.

The patient underwent a full-night laboratory nocturnal polysomnographic study (PSG), and the PSG results were consistent with severe OSAS. The apnoea–hypopnoea index (AHI) was 54.6 events per hour of sleep. After endolaryngeal microsurgery, the symptoms and signs of OSAS ceased, and all PSG parameters relative to breathing abnormalities during sleep showed consistent amelioration. AHI decreased to 2.7 events/hour and sleep architecture improved.

There are reports in the literature demonstrating acute airway obstruction by epiglottic cysts [1–2], but there is no report demonstrating aryepiglottic fold cysts causing OSAS.

The apnoea due to airway obstruction could be justified partially by the mass effect in the larynx and, more importantly, by inferior and posterior displacement of the epiglottis which may lead to supraglottic obstruction, as described by Westerberg et al. [3].

Our findings point to the necessity of a full fiberoptic laryngeal, including a computed tomography (CT) scan examination and overnight PSG, in patients presenting disorder of nocturnal breathing and a laryngeal lesion with a large mass.

References

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