turers depower air bags by 30%. Also, it is now possible for certain drivers in the United States to have a switch installed that would deactivate the air bags.

References

Retropharyngeal Lipoma Causing Sleep Apnea Syndrome

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Lipomas are benign, slow-growing, mesenchymal neoplasms composed of mature fat cells. Although very common, their location in the head and neck region is relatively rare (15%). Head and neck lipomas are more commonly seen in the subcutaneous tissues of the neck, whereas they have seldom been reported in the oral cavity, larynx, and pharynx. Lipomas of the retropharyngeal space are seldom reported; no more than 20 cases have been described in the literature. Because of the slow growth rate, symptoms are late, and the mass can reach a large size before causing airway obstruction. A case of retropharyngeal lipoma causing obstructive sleep apnea is described.

Report of Case
A 56-year-old man presented with a 2-year history of upper airway obstruction, snoring, and frequent episodes of sleep apnea. Anterior rhinoscopy showed normal mucosa, straight nasal septum, and normal turbinates. Examination of the oropharynx showed a soft, nonpulsating, submucosal mass, covered by normal mucosa, bulging from the poste-

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Microscopically, the mass was a typical lipoma. On follow-up, the patient reported that his snoring had significantly reduced and sleep apnea episodes had disappeared as demonstrated by polysomnography. Daytime somnolence had also reduced significantly.

**Discussion**

Lipomas are not commonly found in the upper aerodigestive tract. However, different reports have described lesions in the tongue, floor of the mouth, and lips, and, less frequently, in the peritonsillar space, hypopharyngeal wall, and aryepiglottic fold. Presence in the retropharyngeal space is rare, and the mass has been submucosal in all cases reported in literature. To our knowledge, only one other case with a retromuscular location has been reported. Lipomas of the retropharyngeal area will usually grow to a large size before they are discovered, and the initial symptom is often related to the airway, that is, nasal obstruction or snoring, depending on the location and size of the mass. A case of retropharyngeal lipoma causing obstructive sleep apnea has recently been reported.

Obstructive sleep apnea syndrome is diagnosed when more than five desaturations per hour (PO2 < 80%) can be recorded by polysomnography, while dangerous OSAS is diagnosed when more than 20 desaturations per hour occur. The prevalence among adults is higher in men (9%) than in women (4%). Obstruction can have different causes, including soft palate and base of tongue hypertrophy, nasal obstruction, and other morphologic conditions causing the narrowing of the superior airway tract.

Neoplasms of the pharynx are not frequently reported as a cause of OSAS. In a series of 336 OSAS patients, only three were secondary to pharyngeal neoplasms, all of which were benign. Parapharyngeal masses, however, usually present with different symptoms, such as dysphagia or pain, although in one case of carotid body paraganglioma reported by Mctcrski et al., the presenting symptom was OSAS.

Although magnetic resonance imaging can provide more accurate imaging, artifacts may appear due to breathing movements. A CT scan can also provide adequate information with regard to the composition and extension of the mass. A homogeneous, low-attenuation mass with no clearly defined capsule, and with a sharp demarcation from the surrounding tissue, is highly suggestive of a lipoma. More heterogeneity or density on the CT scan may indicate a liposarcoma.

The benign nature of the tumor, confirmed by FNA, and the detailed radiologic description, enabled us to use a transoral surgical approach, which is much less invasive than cervicotomy, but more challenging because of the narrow surgical area.

The resolution of sleep apnea symptoms after the surgical procedure confirmed the obstructive nature of the lesion. This suggests that any patient presenting with sleep apnea should undergo a careful evaluation of the upper aerodigestive tract.

**References**