

The Oncological Concerns of Obstructive Sleep Apnea Surgeries: An Alarming Preliminary Report

To the Editor,

Surgical intervention of Obstructive sleep apnea (OSA) could be broadly classified into 2 main targets: removal of static tissue and support of collapsible tissues. Static tissue removal might include tonsillectomy and tongue base lymphoid tissue ablation.^{1,2} Noticeably, the excised tissues are not usually sent for histopathological examination. To the best of our knowledge, this is the first report of oncological issues in OSA surgeries.

Out of 209 files of adult OSA surgery (with no preoperative oncological concerns) patients in 4 years duration, we report 2 cases of accidental discovery of tumors in excised specimens. The first patient was a 48-year-old male (BMI = 27.4). He had more than 2 years' history of loud snoring and other OSA symptoms. On full-night polysomnography (PSG), his apnea/hypopnea index (AHI) was 18 and the mean lowest oxygen saturation level (LO₂) was 92.4. Awake endoscopy and DISE showed predominant retropalatal collapse.³⁻⁵ He had grade 3 adenoidal hypertrophy with no ulceration or other alarming manifestations. Preoperative laboratory and CT requests were unremarkable; the CT revealed no tissue invasion or bone destruction and was negative for cervical lymph nodes. The patient had multilevel sleep surgery (MSS).² Adenoidectomy was performed; it was smoothly conducted with minimal bleeding. The adenoidal tissue specimen was not suspicious except for the unusual size for this age, so we decided to send it for H/P. We admit that our primary concern was viral infections. Histopathological examination (H) revealed grade I squamous cell carcinoma.

The second case was 51 year old with more than 2 years of OSA symptoms. Both tonsils were symmetrical (grade IV) and showed no alarming signs. On PSG, AHI = 21.4 and LO₂ was 89.8. Computed tomography showed gross homogenous symmetrical tonsillar swellings with preserved tissue planes and bilateral cervical lymph nodes (less than 2 cm with intact nodal capsule). During awake endoscopy (and Drug induced sleep endoscopy, DISE), he showed predominant retropalatal collapse.³⁻⁵ The patient had MSS. Smooth cold steel tonsillectomy was done; minimal bleeding and good surgical planes were noticed, and the excision was performed within a reasonable surgical time. H/P reported large non-Hodgkin lymphoma. Written informed consent was obtained from the patients who agreed to take part in the study.

In conclusion, sleep surgery is a rapidly growing but still young subspecialty. The basic message of this letter is a step back from the relatively recent subspecialty toward our ENT surgery base. Although this report does not exceed the usual patterns of tumor discovery, it might raise the expectation standards for oncological issues during sleep surgery among young sleep surgeons.

Informed Consent: Written informed consent was obtained from the patients who agreed to take part in the study.

Peer-review: Externally peer-reviewed.

Declaration of Interests: The author has no conflict of interest to declare.

Funding: The author declared that this study has received no financial support.

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Cite this article as: Askar SM. The oncological concerns of obstructive sleep apnea surgeries: An alarming preliminary report. *ENT Updates.* 2024;14(2):55-56.

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Received: April 7, 2024

Accepted: May 28, 2024

Publication Date: July 5, 2024



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