ENT Approach to Sleep-Related Breathing Disorders

Mirjana Grebenar Čerkez[1,2]

[1] Department of Otorhinolaryngology and Head and Neck Surgery, University Hospital Centre Osijek, Osijek, Croatia
[2] Faculty of Medicine, Josip Juraj Strossmayer University of Osijek, Osijek, Croatia

Contact: mirjanagrebenar@gmail.com

Abstract

Two principal pathophysiological mechanisms contribute to obstructive sleep apnea (OSA): fixed upper airway obstruction and dynamic collapse of upper airway structures. Fixed obstruction has a clearly defined anatomical component and may be present during wakefulness. In contrast, dynamic collapse is associated with impaired neuromuscular control of upper airway patency during sleep. In adults, the etiology of OSA is frequently multifactorial and not always fully understood. Otorhinolaryngologists play a central role in diagnosing and treating upper airway disorders. A comprehensive evaluation—including a detailed medical history, clinical examination during wakefulness, and drug-induced sleep endoscopy (DISE)—helps identify the anatomical level and pattern of obstruction or collapse. These findings support individualized treatment planning. Treatment options include primary surgical intervention, procedures aimed at improving the effectiveness or tolerability of conservative therapy, and supportive measures. A thorough understanding of upper airway anatomy and its dynamic behavior is essential for appropriate treatment selection. In the approach presented, otorhinolaryngological treatment is considered for patients with mild, moderate, or severe OSA and a body mass index (BMI) ≤30 kg/m^2, exceptionally up to 35 kg/m^2, particularly when continuous positive airway pressure (CPAP) therapy is not indicated, is poorly tolerated, or produces an inadequate response.

Keywords: obstructive sleep apnea; otorhinolaryngology; upper airway obstruction; airway collapse

2026. Grebenar Čerkez M.
This abstract is published under the terms of the Creative Commons Attribution License (CC BY 4.0) (https://creativecommons.org/licenses/by/4.0/)

ORL pristup poremećajima disanja u spavanju

Mirjana Grebenar Čerkez[1,2]

[1] Klinika za otorinolaringologiju i kirurgiju glave i vrata, Klinički bolnički centar Osijek, Osijek, Hrvatska
[2] Medicinski fakultet, Sveučilište Josipa Jurja Strossmayera u Osijeku, Osijek, Hrvatska

Kontakt: mirjanagrebenar@gmail.com

Sažetak

Dva osnovna patofiziološka mehanizma pridonose nastanku opstruktivne apneje u spavanju (OSA): fiksna opstrukcija gornjih dišnih putova i dinamički kolaps njihovih anatomskih struktura. Fiksna opstrukcija ima jasno izraženu anatomsku komponentu i može biti prisutna tijekom budnosti. Nasuprot tome, dinamički kolaps povezan je s poremećajem neuromuskularne kontrole prohodnosti gornjih dišnih putova tijekom spavanja. U odraslih je etiologija OSA-e često multifaktorijalna i nije uvijek potpuno razjašnjena. Otorinolaringolozi imaju središnju ulogu u dijagnostici i liječenju bolesti gornjih dišnih putova. Sveobuhvatna procjena, koja uključuje detaljnu anamnezu, klinički pregled u budnom stanju i endoskopiju tijekom farmakološki induciranog spavanja (*drug-induced sleep endoscopy*, DISE), pomaže u prepoznavanju anatomske razine i obrasca opstrukcije ili kolapsa. Ti nalazi omogućuju individualizirano planiranje liječenja. Terapijske mogućnosti uključuju primarno kirurško liječenje, zahvate usmjerene na poboljšanje učinkovitosti ili podnošljivosti konzervativne terapije te potporne mjere. Temeljito poznavanje anatomije gornjih dišnih putova i njihova dinamičkog ponašanja nužno je za odgovarajući odabir liječenja. U prikazanom pristupu otorinolaringološko liječenje razmatra se u bolesnika s blagom, umjerenom ili teškom OSA-om i indeksom tjelesne mase (ITM) ≤30 kg/m^2, iznimno do 35 kg/m^2, osobito kada liječenje kontinuiranim pozitivnim tlakom u dišnim putovima (CPAP) nije indicirano, kada ga bolesnik loše podnosi ili kada terapijski odgovor nije zadovoljavajući.

Ključne riječi: opstruktivna apneja u spavanju; otorinolaringologija; opstrukcija gornjih dišnih putova; kolaps dišnih putova

2026. Grebenar Čerkez M.
This abstract is published under the terms of the Creative Commons Attribution License (CC BY 4.0)
(https://creativecommons.org/licenses/by/4.0/)