What Is the Cause of the Loud Snoring—and What Should Be Done?

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Figure 1.

Figure 2.

A 42-year-old male with hypertension and asthma was evaluated for excessive daytime sleepiness and loud snoring. On exam it was found that BMI was 35 kg/m², neck circumference was 41 cm, upper airway was crowded, and there was no audible wheezing on lung auscultation. A nocturnal polysomnogram revealed moderate obstructive sleep-disordered breathing. On continuous positive airway pressure (CPAP) of 9 cm H₂O using full face mask, the patient exhibited the breathing pattern shown in Figure 1.

The combination of snoring and flow limitation during expiration (as seen in Figure 1) indicates expiratory pharyngeal narrowing that requires higher distending pressure with CPAP. Increasing CPAP to 15 cm H₂O during the same stage of sleep and body position eliminated expiratory snoring and flow limitation, as shown in Figure 2.

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