## When snoring is more than an annoyance

We have all seen cartoons of an unhappy wife awake in bed next to her loudly snoring husband. Casual conversations with friends, particularly female ones, indicate that this is an accurate representation of a common scenario. As I have started to probe more diligently for evidence of obstructive sleep apnea (OSA) in my patients, not just in those who complain of "fatigue" (more patients use this term with me than "sleepiness"), I see a lot of shaking of heads from the wives of men who deny that they snore or have disrupted sleep. I am not implying that this is solely a male disease. Far from it. But as in other medical scenarios, the Y chromosome seems somehow linked to denial or lack of awareness of symptoms. In any event, I was not a bit surprised to read in the review by Dr. Mehra in this issue of the *Journal* (page 479) that 17% of adults may have OSA.

As awareness of OSA has grown and testing for it has become easier, multiple reports have documented associated comorbidities: hypertension, restless leg syndrome, gout, and neurocognitive deficits. Home devices to treat OSA have significantly improved. Technological advances have led to the development of small, quiet, smart pumps that provide continuous positive airway pressure (CPAP) via nasal or relatively comfortable full-face masks. Compliance and patient acceptance of CPAP have improved, although patient education and a bit of cajoling in the office are still necessary—less so if the bedroom partner is also present for this discussion.

Perhaps surprising is a growing pool of data showing that CPAP's benefits extend to more than just reducing sleepiness. It can reduce nocturia, restless leg syndrome, arrhythmias including atrial fibrillation, gastric reflux, and fatal and nonfatal cardiovascular events. Snoring and thus probably sleep-partner satisfaction are also improved.

Several physiologic mechanisms may explain the benefits of CPAP, including reducing hypoxic episodes (explaining its effect on atrial fibrillation), altered atrial natriuretic factor levels (thus reducing nocturia), and changing intrathoracic pressure (thus reducing gastric reflux). It will be interesting to see if there are long-term effects of successfully applied CPAP on neurocognition and progression of neurodegenerative diseases.

While high-decibel snoring and snorting are not present in all patients with OSA, it is quite clear now that they represent far more than an annoyance. We should be vigilant about looking for OSA and strongly encourage a trial of CPAP in appropriately diagnosed patients.

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