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Letter to the Editor/ Editöre Mektup

Is the Gender Difference in the Association Between Obesity and OSAS Really Less in Women?

Obezite ve OSAS Arasındaki İlişkide Cinsiyet Farkı Kadınlarda Gerçekten Daha Mı Az?

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Dear Editor,

Obstructive sleep apnea syndrome (OSAS) is a serious disorder characterized by recurrent episodes of partial or complete upper airway obstruction. Although this syndrome carries significant systemic risks, such as metabolic and cardiovascular diseases, it is less often diagnosed in women than in men. It is recognized that OSAS is strongly associated with obesity and has a higher prevalence in the male gender. However, emerging evidence suggests that OSAS is significantly underdiagnosed in women due to different clinical presentations and physiological characteristics and that the gender difference may not be as high. Given that obesity is an important risk factor for OSAS, it is important to investigate gender-based variations in the effect of obesity on OSAS prevalence and severity. Although the male-female ratio in OSAS prevalence is reported to be 2:1 and even 4:1 in some studies, this may be thought to be due to the lack of standardization of factors such as age, hormonal status and ethnicity. It has been suggested that female hormones help prevent airway collapse by increasing the tone of the upper airway dilator muscles. This may be considered as one of the reasons for the difference in the prevalence of OSAS before and after menopause.[1,2]

Characteristics of body fat distribution in men and women, such as androgenic-gynoid, central-peripheral, visceral-subcutaneous, may explain some of the sex-related differences in the relationship between obesity and OSAS. Men typically have greater upper airway collapsibility due to increased fat deposition in the neck region, whereas women tend to accumulate adipose tissue peripherally rather than centrally. However, this may change in postmenopausal women due to hormonal differences, and the pattern of adiposity tends to be more androgenic-centralized. Recent evidence suggests that postmenopausal women experience a significant increase in OSAS risk, possibly due to a decline in protective estrogen and progesterone levels. Symptoms of OSAS may differ according to gender. While men may have typical symptoms such as apnea diagnosis, loud snoring and excessive daytime sleepiness, women may have more prominent non-classical symptoms such as insomnia, depression and fatigue. For this reason, many women may be diagnosed with different conditions such as chronic fatigue syndrome and mood disorders. This appears to be an important factor in the underdiagnosis of OSAS in women.

There is clearly a need to focus on approaches that are free of male gender bias in OSAS. The aim should be to provide more inclusive screening methods for the female sex that do not ignore postmenopausal hormonal changes and atypical OSAS symptoms that may increase the risk of OSAS. Furthermore, anthropometric measures such as waist-to-height ratio and visceral fat assessment should be added to traditional measures such as BMI.[3,4]

In conclusion, although OSAS is generally recognized as a predominant condition in the male gender, increasing data suggest that OSAS is also underdiagnosed in women. In this context, there should be more tailored approaches for the early diagnosis of OSAS in female patients, taking into account age, hormonal and regional factors and aiming to expand diagnostic guidelines to include female-specific symptoms.

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