



Aging effect on sleepiness and apneas severity in patients with obstructive sleep apnea syndrome

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Dear Editor,

With great interest, I read the meta-analysis study about aging effect on sleepiness and apneas severity in patients with obstructive sleep apnea syndrome (OSAS) [1]. Iannella et al. concluded that no significant difference was found in baseline apnea hypopnea index (AHI) between young (< 65 years old) and elderly (> 65 years old) patients in this meta-analysis. The effects of OSAS on daytime sleepiness seem to be much more prominent in young (< 65 years-old) patients than in elderly (> 65 years old) patients.

Though elderly patients (> 65 years old) showed less daytime sleepiness (the Epworth Sleepiness Scale evaluation) in the meta-analysis, the Epworth Sleepiness Scale is a self-administered questionnaire with many uncontrollable limitations [2, 3]. The Epworth Sleepiness Scale is based on subjective reports, which could be influenced by the same sources of bias and inaccuracy [2]. OSAS patients may not usually make accurate predictions of the level of drowsiness and their crash-risk, especially when they are driving a vehicle. Moreover, the Epworth Sleepiness Scale is not a diagnostic tool by itself. Last but not least, the Epworth Sleepiness Scale is not suitable for patients with serious cognitive impairment [2, 3]. In Iannella et al.'s study, elderly (> 65 years old) patients may partly suffer some diseases causing cognitive impairment, which would undoubtedly reduce the reliability of these patients' the Epworth Sleepiness Scale scores.

As we know, the AHI is an objective metric defining OSAS [4, 5]. So far, it remains the best and the most used

metric for severity [5]. The AHI is still the best metric to evaluate OSAS patients for diagnosis and guide therapy [4, 5]. However, no statistical difference regarding AHI difference emerged from the comparison of the two groups of patients in this meta-analysis, which suggested that the aging effect on sleepiness and apneas severity in patients with OSAS has no significant difference.

The lack of sufficient objective indicators to assess OSAS in young and elderly patients is certainly a big problem in this meta-analysis. Therefore, Iannella et al.'s conclusion based on limited evidence should be treated cautiously, which may likely be not applicable in clinical practice.

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Compliance with ethical standards

Conflict of interest The author declares that he has no conflict of interest.

Ethical approval This article does not contain any studies with human participants or animals performed by the author.

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