



Editorial

Use of large patient registries in sleep apnea patients – Results from the ESADA database



Sleep disordered breathing has been reported to have a very high prevalence. One European population based study on a cohort of people aged 40 and above reported a prevalence of moderate and severe sleep apnea of 49.7% in men and 23.4% in women [1]. Another study, published only two years before by Peppard et al., based on the Wisconsin Sleep cohort study showed that the prevalence rates of moderate to severe sleep apnea increased dramatically over the last two decades [2]. In addition, Peppard et al.'s study showed a strong age dependency of sleep apnea prevalence. Based on the knowledge that moderate and severe sleep apnea is a condition that needs treatment in order to prevent negative health consequences, this incredibly high and increasing prevalence of sleep apnea is frightening. Should we treat all these patients? Therefore, this reported high prevalence one of the economic challenges we see in the management of patients with sleep disordered breathing. Unfortunately, the current situation is even more complicated. Because this is considered to be a serious health risk, a large number of sleep apnea patients are currently being treated. On the other hand, other recent studies have shown that treating a large number of patients with CPAP based on their apnea hypopnea index (AHI) and existing cardiovascular risk alone does not decrease their risk for future events [3].

In light of these results, it becomes clear that the earlier studies with all positive findings in terms of treatment success were based on patients who came to a sleep center with complaints or symptoms relevant enough to seek the help from a sleep center. This indicates that we are observing, diagnosing, and treating different groups of patients with sleep apnea. Currently, there is some debate on how far sleep disordered breathing might occur with many high prevalence disorders such as hypertension and diabetes. Sleep disordered breathing evolved to be a risk factor with high presence in many clinical populations. However, sleep disordered breathing may not need to be treated in all cases based on an increased apnea-hypopnea index alone. The challenging questions are, who finally needs treatment, and who finally profits from treatment? To answer these questions we will need large databases and large patient registries. One such large patient registry is the European Sleep Apnea Database (ESADA), which for almost 10 years has been collecting patients with sleep apnea from 20 European countries [4]. A new evaluation of the registry addresses the emerging

question by checking the clinical global impression scale (CGI) in 7581 patients with sleep apnea. With this assessment of patient's global functioning, the study addresses exactly the impairment of the patients. The results of this large study revealed that many known predictors such as age, BMI, and other diagnoses modify the CGI. CGI severity score correlated with all conventional sleep apnea severity parameters such as AHI, oxygen desaturation index, mean, and lowest oxygen saturation [4].

Some of Dieltjens et al.'s [4] results need to be noted, because these results can set future direction in terms of phenotype. They found that CGI was worse in women than in men for comparable sleep apnea severity. Younger patients had a lower CGI compared to older ones with similar severeness of sleep apnea. Of specific note is that the CGI improvement score predicts CPAP compliance at follow-up much better than other scores. Thus, these results may help to further phenotype patients with sleep apnea, making better treatment decisions and may help to understand the negative results of large trials much better.

References

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