Obstructive sleep apnea (OSA) is a common disease that affects 10% of the middle-aged population and becomes more prevalent with age. OSA worsens the quality of life and it is related to systemic hypertension and cardiovascular diseases (CVD). Continuous positive airway pressure is the treatment of choice, which improves symptoms and some consequences of the disease. Due to all of this, OSA is considered a public health problem and the management of OSA is a challenge for any health system. Currently, its management is focused in specialized sleep units. This approach is expensive, not available in all hospitals and frequently generates a waiting list for sleep studies. As in any other frequent disease (diabetes, hypertension, chronic obstructive pulmonary disease (COPD) the primary care physician must be involved. Some experiences in Australia and in Spain have demonstrated that a program based on the primary care physician’s care achieves the same results in treatment compliance and symptoms control than the standard follow up at the sleep unit. Primary care management of OSA is a cost-effective option that will change the current evaluation and follow up of patients with suspected OSA syndrome.

In recent decades thousands of papers have related obstructive sleep apnea (OSA) to systemic hypertension or CVD. Different pathogenic pathways (mainly an increase in the sympathetic tone and oxidative stress) have been clearly related to the pathogenesis of this association. OSA is a cause of secondary hypertension and OSA treatment decreases blood pressure mainly in subjects with resistant hypertension. However, from a clinical point of view, the relevance of OSA in the incidence or in the prognosis of CVD could be mild. Also, the effect of OSA treatment on CVD is under debate. In fact, there is no evidence that OSA treatment reduces cardiovascular morbi-mortality. Two ongoing clinical trials (SAVE and ISAACC studies) will clarify this uncertainty in the near future. The results of these two studies are crucial for the future of the field.

There is emerging evidence that links OSA to the incidence and mortality from cancer. The repetitive upper airway collapse induces arousal from sleep and oxyhemoglobin desaturation. In rodent models, both mechanisms have been related to the growth rate and aggressiveness of melanoma. It is probable that the effect of OSA on the tumor could be organ or cell specific. There is a lack of information on the associations of OSA to specific cancer types. The clinical relevance of this relationship has to be established in the following years.

Finally, we have to identify and understand the different phenotypes that configure the spectrum of this disease. There is an urgent need to identify the subject susceptible to the disease complications and to identify the individuals who are protected. Also, we need to know the bases of the variability in the treatment response. In other words, we have to move forward in the implementation of personalized medicine in the sleep field.
Bibliography


