Obstructive sleep apnea and its comorbidities: a study of 100 patients

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INTRODUCTION

Obstructive sleep apnea syndrome (OSAS) is characterized by the complete or partial obstruction of the upper airway during sleep, resulting in periods of apnea, oxyhemoglobin desaturation and frequent awakenings while sleeping, with consequent excessive daytime sleepiness1.

OSAS has adverse consequences, such as high blood pressure (HBP), obesity, diabetes mellitus type II (DM II), cardiovascular and cerebrovascular diseases, behavioral changes, resulting in important public health concerns. These comorbidities associated with increased mortality in patients with OSAS compared with the general population the same age range2. Other comorbidities associated with OSAS also have reported are: depression, asthma, and gastroesophageal reflux disease.

This study aims to know the comorbidities associated with OSAS and its prevalence in patients with clinical and polysomnographic OSAS in brazilian population. Realized through records in the Nucleo of Otorlaryngology and Head and Neck Surgery Sao Paulo.

METHODS AND MATERIALS

A retrospective study of medical records of 100 patients previously diagnosed with OSAS polysomnographically from February 2011 to January 2013. The apnea-hypopnea index (AHI) ranged from 6.7 to 98.59. The degree apnea was classified according to the AHI: mild (5-15 events / hour), moderate (15 to 30 events / hour) and severe (more than 30 events / hour).

Patients underwent history, thorough clinical examination, ENT examination (oral exam, rhinoscopy and otoscopy), and flexible endoscopy, in order to verify the presence of obstructive sites. Measures such as weight, height, calculation of body mass index (BMI) were performed. Sleep studies using full night polysomnography was performed in all patients.

We collected data regarding comorbidities of patients through questionnaires related to diseases of the cardiovascular, respiratory, endocrine, neurological, psychiatric, gastrointestinal and metabolic.

RESULTS

We evaluated 100 patients, 84 males and 16 females, mean age 50.05 years, range 19-75 years. The BMI ranged from 20.7 to 50.81. The AHI ranged from 6.7 to 98.59 with an average of 35.19. Anthropometric measurements are measured in Table 1.

In 34% of patients presented obesity, the most prevalent class I obesity (BMI 30-34.9) with 26%. The prevalence for the other conditions were: high blood pressure (39%), depression (19%), gastroesophageal reflux disease (18%), diabetes mellitus (15%), hypercholesterolemia (10%), asthma (4%). More details of the results are shown in Table 2.

The prevalence of gastroesophageal reflux disease (GERD) in patients with OSAS is significantly higher than the general population. In our study 18% of patients with OSAS presented GERD.

CONCLUSIONS

According to the data found in this study about the brazilian population and compared with other studies, we found that OSA significantly increases the risk of comorbidities such as high blood pressure obesity, depression, gastroesophageal reflux disease, diabetes mellitus, hypercholesterolemia and asthma. The prevalence of these comorbidities in patients with OSAS is higher than the general population.

REFERENCES