Correlation between the Friedman staging system and the upper airway volume in patients with obstructive sleep apnea

Marcos Marques Rodrigues
Araraquara University, Brazil

Purpose: This study was designed to evaluate the correlation between computed tomography findings and data from the physical examination and the Friedman staging system (FSS) in patients with obstructive sleep apnea (OSA).

Patients & Methods: We performed a retrospective evaluation by reviewing the medical records of 33 patients (19 male and 14 female patients) with a mean body mass index of 30.38 kg/m² and mean age of 49.35 years. Among these patients, 14 presented with severe OSA, 7 had moderate OSA, 7 had mild OSA and 5 were healthy.

Results: The patients were divided into 2 groups according to the FSS: Group A comprised patients with FSS stage I or II, and group B comprised patients with FSS stage III. By use of the Fisher exact test, a positive relationship between the FSS stage and apnea-hypopnea index (P=.011) and between the FSS stage and body mass index (P=.012) was found. There was no correlation between age (P=.55) and gender (P=.53) with the FSS stage. The analysis of variance test comparing the upper airway volume between the 2 groups showed P=.018.

Conclusions: In this sample, the FSS and upper airway volume showed an inverse correlation and were useful in analyzing the mechanisms of airway collapse in patients with OSA.

Biography
Marcos Marques Rodrigues is Assistant Professor of Otorhinolaryngology at University of Araraquara. He completed his Master’s Graduation in School of Medical Sciences at Unicamp- Campinas, Brazil in 2014. He is finishing his PhD in the beginning of 2017. His principal studies involve the evaluation of obesity and sleep apnea.

marcosmmr@hotmail.com