

中文題目：睡眠呼吸中止症增加中心性漿液性脈絡膜視網膜病變的風險

英文題目：Sleep Apnea Increased The Risk of Central Serous Chorioretinopathy

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Introduction

Sleep apnea (SA) is a common sleep disorder characterized by repetitive breathing pause during sleep. Due to intermittent hypoxia and other mechanisms, SA may lead to the development of many diseases, such as cardiovascular disorders, cerebrovascular disorders, and so on. Central serous chorioretinopathy (CSCR) is characterized by idiopathic serous detachment of the neurosensory retina and/or retinal pigment epithelial detachment. It has been debated whether SA increases the risk of CSCR. We therefore conducted a nationwide population-based study using Taiwan National Health Insurance (NHI) database to further identify the association between SA and CSCR.

Methods

From the dataset of 1 million subjects randomly sampled from individuals enrolled in the NHI system in 2010, we enrolled adult patients with a diagnosis of SA. Patients with CSCR diagnosed prior to SA diagnosis were excluded. The date of first SA diagnosis was defined as the index date for each patient. Each SA patient was matched to 30 randomly-selected, age- and gender-matched control subjects without any SA diagnosis. The control subjects were assigned index dates as their corresponding SA patients, and were ensured having no CSCR diagnosed prior to their index dates. Using Poission regression analysis, the incidence rate of CSCR was compared between SA patients and the control subjects.

Results

A total of 10,753 SA patients and 322,590 control subjects were identified for further analysis. The incidence rate of CSCR was significantly higher in the SA patients as compared with the control subjects (2.9 v.s. 2.1 per 10,000 patient-year; incidence rate ratio [95% confidence interval] = 1.4 [1.3 - 1.5], $p < 0.0001$). After adjusting for age, gender, residence area, income levels, and comorbidities, the incidence rate ratio remained significantly increased (1.3 [1.2 - 1.4], $p < 0.0001$).

Conclusion

Our study revealed a significant higher incidence rate of CSCR in SA patients as compared with both the control subjects. Further study may be needed to identify the mechanism underlying the association between SA and CSCR.