



## EDITORIAL

# Obstructive Sleep Apnea (OSA) in children: Fact and Challenge

## *Apnées Obstructive du Sommeil chez les enfants: Réalité et Défi*

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Obstructive sleep apnea (OSA) is a continuous and repetitive episode of partial or complete obstruction of the upper respiratory tract during sleep resulting in complete hypopnea or apnea although these subjects still have a respiratory effort. Obstructive sleep apnea syndrome (OSAS) is the most common form of respiratory disorder during sleep, which is relatively common. In North America, there are over 12 million people, of whom 3% are female and 9% are male. In children, it is recognized that OSA is not only a general health problem but also a significant cause of disease, accounting for 1% -5%. OSA occurs at all ages with the highest prevalence of 2-8 years, which is associated with the development of upper lymphatic tissue in this stage.

Epidemiological studies on OSAS in Asia, South East Asia in particular, are few. Recently, the EPSASIE study realized in Vietnam aimed to determine the prevalence of OSAS in an adult showed that the prevalence of OSA with an apnea-hypopnea index (AHI)>5 was 8.5% and with AHI>15 was 5.2% of cases. This prevalence of OSA is quite high in the Vietnamese population and comparable with current

literature data. However, there is still absent of study about OSA in children in this country.

OSA is characterized by all or part of the upper respiratory tract collapsed during sleep over 10 seconds, causing hypoxia and the generation of oxidative stress, if not diagnosed and treated soon it will cause of serious health problem and socio-economic burdens. In children in particular, OSA causes hypoxia at night and also causes hemodynamic, metabolic, and mental disorders. In particular, the consequences of OSA on neurocognitive development are very important because they can slow down psychological and physical development, reduce learning and memory. In addition, children with OSA may be severely depressed or hyper reactive. Therefore, the harmful effects of OSA in children should be diagnosed and treated promptly. In this issue of Journal of Functional Ventilation and Pulmonology, Nguyen-Hoang et al. attempted to describe all laboratory techniques using to diagnosis OSA in children. However, polysomnography rather than respiratory polygraphy is still the gold standard for diagnosing OSA in this population.

### CONFLIT OF INTEREST

Non.

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