

**Editorial** 

http://dx.doi.org/10.5415/apallergy.2014.4.3.131 Asia Pac Allergy 2014;4:131-133

## Allergic rhinitis, chronic rhinosinusitis and nasal polyposis in Asia Pacific: impact on quality of life and sleep

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Allergic rhinitis (AR), often considered to be a trivial health problem, affects up to 20% of the world population and is the most common chronic disease [1]. The importance of AR lies in the fact that it is predominantly associated with bronchial asthma, a disease which affects 300 million patients worldwide [2]. Furthermore, these patients often have associated sinusitis which is now termed as chronic rhinosinusitis (CRS). To compound the problem, patients with CRS are often affected by nasal polyposis (NP) which is now considered as a subgroup since they share the same pathophysiology. Rhinosinusitis and associated NP often go undiagnosed resulting in inappropriate management and suboptimal control [3].

The burden of AR and associated morbidities in the Asia Pacific region is immense as highlighted by the Phase III (1999–2004) of the International Study on Asthma and Allergy in Childhood studies conducted on two age groups of 6–7 and 13–14 years. The prevalence of "allergic rhinoconjunctivitis" ranged from 3.6% in Indonesia to 24.2% in Taiwan across both age groups [4].

Not only does AR restrict the physical, psychological and

social aspects of the patients, this bothersome disease can also impact their functions at work or school. Many quality of life (QoL) studies have highlighted that adult patients were bothered by sleep disturbances, annoying practical problems like having to blow their noses and carrying tissues, and limitations in their daily activities [5-8]. Adolescents had problems with concentration along with hampering of the process of learning and school performance. Although younger children were less disturbed by emotional dysfunction and disturbances in daily routine, they were more troubled by having to take medications and carrying tissues. Moreover, their parents appeared to be more bothered than the children themselves [9]. Apart from poor quality of sleep, day-time fatigue and sleepiness were often seen in children [10].

A majority of the patients with AR have underlying CRS and NP. Both these inflammatory nasal disorders lead to further impairment in QoL and sleep. Coexistent CRS was found in 63–89% of our adult patients with AR [11-13] and 65% of children [14]. When present, CRS added to the morbidity as evidenced

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**Received:** July 23, 2014 **Accepted:** July 24, 2014

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by poorer subjective scores. Further, these patients had significant nocturnal sleep disturbances and excessive daytime sleepiness as compared to those without CRS. The QoL too was significantly impaired in this subset of patients when compared to those with AR alone [15]. The presence of NP in patients with AR and CRS further worsens the outcomes. We have demonstrated a significant deterioration in the mean Lund Mackey score, Global Visual Analog Scale score, Sino-Nasal Outcome Test 22 score and QoL scores in AR/CRS patients with NP [13]. Apart from the negative impact on QoL, sleep disturbances are more profound in patients with NP [16].

Even when the presence of NP and CRS in AR is sought for, inadequate treatments, both medical and surgical, along with troublesome adverse effects of the medications add to the problem. In this issue of the Journal, a study from Malaysia surveys the current management practices in AR/CRS and highlights that drowsiness/sedation even with nonsedating antihistamines was the major unmet need [17]. Unfortunately, AR and associated comorbidities do not elicit the importance that these disease complexes deserve, neither from the patient nor from the care givers. The importance of diagnosing and treating CRS and NP cannot be overemphasized especially when a significant proportion of population is afflicted with negative impact on their daily lives, both during the day as well as night [18].

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