

# Challenges for Uncontrolled Upper Airway Inflammation: Allergic and Non-Allergic Rhinitis

Department of Otolaryngology & HNS, Seoul St. Mary's Hospital, The Catholic University, Seoul, Korea

Soo Whan Kim

---

The upper airway includes the nasal cavity and sinuses and the pharynx, and ends at the upper level of the larynx. Chronic upper airway diseases encompass intermittent and persistent inflammatory diseases of the upper airways, excluding those induced by acute infection or anatomic abnormalities. These include allergic rhinitis (AR), nonallergic rhinitis (NAR), chronic rhinosinusitis (CRS) with and without nasal polyposis, and occupational rhinitis. These disorders are extremely common and present in all ages, all ethnic populations, and all countries. In addition to the increasing public health effect of these diseases, the socioeconomic effect is well recognized. Comorbidities are common and increase the complexity of the management and costs.

Although the majority of patients with chronic upper airway diseases have controlled symptoms during treatment, many patients have severe chronic upper airway diseases (SCUADs).

SCUAD defines those patients whose symptoms are inadequately controlled despite adequate (ie, effective, safe, and acceptable) pharmacologic treatment based on guidelines. In some patients, SCUADs can be associated with different forms of upper airway diseases (eg, AR and NAR), and a precise diagnosis is needed.

These patients have impaired quality of life, social functioning, sleep, and school/work performance.

The prevalence and costs of chronic upper airway diseases continue to grow worldwide. However, health care expenditures, especially in the field of reimbursement, have been reduced in many countries. Some chronic upper airway diseases, such as AR, are not regarded as severe diseases, reducing the possibility for reimbursement of medications. This might further increase undertreatment. Moreover, it might limit novel treatment discovery because the pharmaceutical industry will only accept the high costs for drug development if these drugs can be licensed in the future, reimbursed, and used by patients.

In this lecture I review the state of the art, highlighting gaps in our knowledge, and proposes several areas for a

better understanding, prevention, and management of SCUADs.

## References

1. Bousquet J, Van Cauwenberge P, Khaltaev N. Allergic rhinitis and its impact on asthma. *J Allergy Clin Immunol* 2001;108(suppl):S147–334.
2. Bousquet J, Khaltaev N, Cruz AA, Denburg J, Fokkens WJ, Togias A, et al. Allergic Rhinitis and its Impact on Asthma (ARIA) 2008 update (in collaboration with the World Health Organization, GA(2)LEN and AllerGen). *Allergy* 2008;63(suppl 86):8–160.
3. Bousquet J, Khaltaev N. Global surveillance, prevention and control of chronic respiratory diseases. A comprehensive approach. Global Alliance Against Chronic Respiratory Diseases, World Health Organization, Geneva; 2007.
4. Greiner AN, Meltzer EO. Pharmacologic rationale for treating allergic and nonallergic rhinitis. *J Allergy Clin Immunol* 2006;118:985–98.