Asia Pacific allergy

pISSN 2233-8276 · eISSN 2233-8268

Editorial

http://dx.doi.org/10.5415/apallergy.2011.1.3.105
Asia Pac Allergy 2011;1:105-107

Current trends in upper airways and ocular allergic inflammation

Ashok Shah

Department of Respiratory Medicine, Vallabhbhai Patel Chest Institute, University of Delhi, Delhi 110 007, India

The current issue of *Asia Pacific Allergy* (*AP Allergy*) focuses on 'nasal and ocular allergy'. The "Allergic Rhinitis and its Impact on Asthma (ARIA) 2008 Update" document mentioned that more than 600 million subjects suffer due to allergic rhinitis (AR) in some form or the other [1]. Although a cause of significant and widespread morbidity, AR is often viewed, rather erroneously, as a trivial disease [2]. It frequently coexists with asthma and has a major impact on the quality of life of these patients [3]. AR is a much overlooked disease with neither the patient nor the health care provider giving it the attention it deserves. It may be argued that in countries where the speciality of allergology is yet to mature, allergic rhinitis usually falls in the grey area between the otorhinolaryngologist and the pulmonologist with resultant neglect [4].

The International Study on Asthma and Allergy in Childhood (ISAAC) [5, 6] described prevalence and severity of asthma, AR and eczema in children using a standard methodology across the world. This cross sectional survey was conducted in two different age groups, 6-7 year olds and 13-14 year olds. In the first phase (1994-1995) data from 56 countries, showed that the prevalence of rhinitis in patients with itchy-watery eyes ("rhino conjunctivitis") ranged from 0.8% to 14.9% in the 6-7 year old age group and from 1.4% to 39.7% in the 13-14 year-old age group [5]. The figures from the Asia Pacific region and India were much lower when compared with western countries. The phase 3 ISAAC data were collected from 97 countries worldwide (2001-2003) [6]. The average prevalence of current symptoms pertaining to allergic rhinoconjunctivitis was found to be 14.6%. In the Asia Pacific region, the prevalence rates of upper respiratory allergies in the 13-14 year old age group ranged from 4.8% to 24.4%. Interestingly, a significant variation in the prevalence was observed between different centres in the same country.

In this issue of the *AP Allergy*, the occurrence of ocular allergy in the Asia Pacific region is comprehensively reviewed by Katelaris CH [7] from Australia. Allergic conjunctivitis appears to be an even more neglected disease than AR as there are hardly any studies that estimate the true prevalence of allergic eye symptoms [8].

Hadjojo et al. [9] from Singapore reviewed the literature available for the past five years on epidemiology, risk factors, co-morbidities and management of allergic rhinitis in children less than 6 years of age. A wide variation was noted in the prevalence of rhinitis symptoms ranging from 2.8% to 42.7%. Exposure to environmental tobacco smoke and other polluting factors were found to be important risk factors. The role of viral upper respiratory infections in the development of AR needs to be further investigated in large cohort studies.

Corespondence: Ashok Shah
Department of Respiratory Medicine, Vallabhbhai Patel Chest Institute, University of Delhi, Delhi 110 007 P.O. Box 2101, India

Tel : +91-11-2543-3783
Fax: +91-11-2766-6549
E-mail: ashokshah99@yahoo.com

Han and Rhee [10] from Korea have presented the current status of sublingual immunotherapy in AR. The mechanisms, efficacy, advantages including safety, and compliance are discussed. This promising treatment modality is likely to help in altering the immunologic status of atopic individuals, thereby alleviating symptoms and preventing the development of asthma and other long term sequelae.

Two original articles are also part of this issue. The first one from Japan [11], discusses the experimental data on anti-allergic activity of olapatidine in mouse model of allergic rhinitis while the second one from Philippines [12] focuses on sensitisation of house dust mite in relationship with asthma control.

Wang DY [13] has outlined the genetic basis of AR in Singapore. Genome wide association studies have identified single nucleotide polymorphisms on candidate genes that predispose to different disease phenotypes of atopy, AR and asthma.

Pawankar and co-authors [14] from Japan present an incisive, state of the art review on the various immunopathologic mechanisms of AR. The authors highlight the role of different pathways in regulation of allergic inflammation so as to provide a better understanding of the mechanisms involved with a view to target them for potential new therapies.

The case report in this issue, presented by Song et al. [15] from Korea, draws attention to an exceptionally rare allergic phenomenon seen in women. Allergy to human seminal plasma has been documented in less than hundred cases [16]. This report illustrates difficulty in conceiving, one of the aspects of this little known disorder.

We have presented a brief review on allergic *Aspergillus* sinusitis, an uncommon complication in patients with allergic rhinosinusitis [17]. It may occur concomitantly with allergic bronchopulmonary aspergillosis, which is a manifestation of *Aspergillus* hypersensitivity in the airways of asthmatic subjects. Both these diseases must be looked for in all patients with hypersensitivity to *Aspergillus* antigens. The concurrent occurrence of these two diseases reinforces the concept of 'one airway, one disease'.

In conclusion, this theme issue focuses on upcoming and novel concepts related to upper airways and ocular allergic disorders. It paves the way forward for rekindling interest in future areas of research of this not so trivial disease constellation.

REFERENCES

1. Bousquet J, Khaltaev N, Cruz AA, Denburg J, Fokkens WJ, Togias A, Zuberbier T, Baena-Cagnani CE, Canonica GW, van Weel C, Agache I, Aït-Khaled N, Bachert C, Blaiss MS, Bonini S, Boulet LP, Bousquet PJ, Camargos P, Carlsen KH, Chen Y, Custovic A, Dahl R, Demoly P, Douagui H, Durham SR, van Wijk RG, Kalayci O, Kaliner MA, Kim YY, Kowalski ML, Kuna P, Le LT, Lemiere C, Li J, Lockey RF, Mavale-Manuel S, Meltzer EO, Mohammad Y, Mullol J, Naclerio R, O'Hehir RE, Ohta K, Ouedraogo S, Palkonen S, Papadopoulos N, Passalacqua G, Pawankar R, Popov TA, Rabe KF, Rosado-Pinto J, Scadding GK, Simons FE, Toskala E, Valovirta E, van Cauwenberge P, Wang DY, Wickman M, Yawn BP, Yorgancioglu A, Yusuf OM, Zar H, Annesi-Maesano I, Bateman ED, Ben Kheder A, Boakye DA, Bouchard J, Burney P, Busse WW, Chan-Yeung M, Chavannes NH, Chuchalin A, Dolen WK, Emuzyte R, Grouse L, Humbert M, Jackson C, Johnston SL, Keith PK, Kemp JP, Klossek JM, Larenas-Linnemann D, Lipworth B, Malo JL, Marshall GD, Naspitz C, Nekam K, Niggemann B, Nizankowska-Mogilnicka E, Okamoto Y, Orru MP, Potter P, Price D, Stoloff SW, Vandenplas O, Viegi G, Williams D. 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.
2. Deepak D, Shah A. Allergic rhinitis: a neglected disease. Indian J Allergy Appl Immunol 2000;14:1-6.
3. Shah A. Rarely does one hear a wheeze without a sneeze. Indian J Chest Dis Allied Sci 2000;42:143-5.
4. Shah A, Pawankar R. Allergic rhinitis and co-morbid asthma: perspective from India - ARIA Asia-Pacific Workshop report. Asian Pac J Allergy Immunol 2009;27:71-7.
5. Strachan D, Sibbald B, Weiland S, Aït-Khaled N, Anabwani G, Anderson HR, Asher MI, Beasley R, Björkstén B, Burr M, Clayton T, Crane J, Ellwood P, Keil U, Lai C, Mallol J, Martinez F, Mitchell E, Montefort S, Pearce N, Robertson C, Shah J, Stewart A, von Mutius E, Williams H. Worldwide variations in prevalence of symptoms of allergic rhinoconjunctivitis in children: the International Study of Asthma and Allergies in Childhood (ISAAC). Pediatr Allergy Immunol 1997;8:161-76.
6. Aït-Khaled N, Pearce N, Anderson HR, Ellwood P, Montefort S, Shah J. Global map of the prevalence of symptoms of rhinoconjunctivitis in children: The International Study of Asthma and Allergies in Childhood (ISAAC) Phase Three. Allergy 2009;64:123-48.
7. Katelaris CH. Ocular allergy in the Asia Pacific region. Asia Pac Allergy 2011;1:108-14.
8. Riedi CA, Rosario NA. Prevalence of allergic conjunctivitis: a missed opportunity? Allergy 2010;65:131-2.
9. Hadjojo A, Shek LP, van Bever HP, Lee BW. Rhinitis in children less than 6 years of age - current knowledge and challenges. Asia Pac Allergy 2011;1:115-22.
10. Han DH, Rhee CS. Sublingual immunotherapy in allergic rhinitis. Asia Pac Allergy 2011;1:123-9.
11. Tamura T. Investigation of the antiallergic activity of olopatadine on

http://dx.doi.org/10.5415/apallergy.2011.1.3.105

rhinitis induced by intranasal instillation of antigen in sensitized rats using thermography. Asia Pac Allergy 2011;1:138-44.
12. Albano PM, Ramos JD. Association of house dust mite-specific IgE with asthma control, medications and household pets. Asia Pac Allergy 2011;1:145-51.
13. Wang DY. Genetic predisposition for atopy and allergic rhinitis in the Singapore Chinese population. Asia Pac Allergy 2011;1:152-6.
14. Pawankar R, Mori S, Ozu C, Kimura S. Overview on the pathomechanisms of allergic rhinitis. Asia Pac Allergy 2011;1:157-67.
15. Song WJ, Kim DI, Kim MH, Yang MS, Kim YJ, Kim SH, Cho SH, Min KU, Chang YS. Human seminal plasma allergy: successful pregnancy after prophylactic anti-histamine treatment. Asia Pac Allergy 2011;1:168-71.
16. Shah A, Panjabi C. Human seminal plasma allergy: a review of a rare phenomenon. Clin Exp Allergy 2004;34:827-38.
17. Panjabi C, Shah A. Allergic *Aspergillus* sinusitis and its association with allergic bronchopulmonary aspergillosis. Asia Pac Allergy 2011;1:130-7.

 http://dx.doi.org/10.5415/apallergy.2011.1.3.105