

Asthma with Allergic Rhinitis

META FORUM

13 December 2004
London, UK

met-a (mēt'ə) adj.
Beyond; transcending;
more comprehensive

fo-rum (fōr'əm) n.
A public meeting or
presentation involving
a discussion usually
among experts and
often including audi-
ence participation

Improving Outcomes for Asthma Patients with Allergic Rhinitis: A MetaForum Consensus Conference

Leading experts have called for improved treatment for patients with asthma and allergic rhinitis, and greater understanding amongst patients and healthcare professionals of the role allergic rhinitis has in worsening asthma symptoms, treatment outcomes, and patient quality of life. Experts also recommended that the latest asthma guidelines should be evaluated in order to ensure they reflect current medical knowledge on the treatment of allergic asthma.

In 2004, a new type of meeting, called a MetaForum, brought together experts from around the world to evaluate and discuss asthma treatment and patient outcomes. The term "MetaForum" captures the desire to hold an all encompassing discussion amongst leading experts in asthma management. The ultimate goal of the meeting was to arrive at a formal consensus, in which the expert panel and the audience of discussants contributed to identifying actions and the next steps required to improve asthma care and patient quality of life.

The first of these meetings, "Improving Asthma Therapy through More Effective Control of Inflammation," was held in April of 2004 and looked broadly at ways to improve asthma therapy. The excitement and outcomes of this first MetaForum meeting spurred great interest among attendees in exploring the topics and issues raised in greater detail. As a result of this interest, a second meeting was arranged in December of 2004, focusing on one particular action item — the adverse relationship between asthma and allergic rhinitis. This second meeting, involving over 40 leading experts from 21 countries, reviewed and addressed issues surrounding the management of asthma and allergic rhinitis, including the effect of allergic rhinitis on asthma patients, the role of inflammation, and the challenge of treating both conditions under existing asthma guidelines.

"The outcome of the first MetaForum meeting was quite amazing, with a number of countries picking up the challenge to try and bring together the scientific aspects of asthma with the patient perspective."
— Professor David Price

Following presentations from a core panel, the participants and panelists engaged in active discussion in order to identify and reach consensus on the areas for action and the next steps required to improve outcomes for asthma patients with allergic rhinitis.

The MetaForum meeting was made possible through an educational grant by Merck & Co., Inc. Whitehouse Station, NJ, USA.

Consensus of the MetaForum

Key Consensus Actions, MetaForum, December 2004:

- Physicians and patients need to better understand and recognise the impact allergic rhinitis has on asthma symptoms, outcomes, and quality of life.
- Treatment guidelines should be evaluated to ensure they reflect the latest medical knowledge.
- All asthma patients should be evaluated for symptoms of allergic rhinitis, and vice versa.
- Asthma and allergic rhinitis should be managed concomitantly, addressing the "one airway" concept.
- Patients and all healthcare professionals need to be educated on the combined management of asthma and allergic rhinitis.

Meeting Chairs

Stephen T. Holgate
University of Southampton, UK

David Price
University of Aberdeen, UK

Expert Panel Members

Claus Bachert
University of Ghent, Belgium

Sergio Bonini
University of Naples, Italy

Tari Haahntela
Skin and Allergy Hospital
Helsinki University Hospital, Finland

Peter Jeffery
Imperial College London at
Royal Brompton Hospital, UK

Jim Kemp
University of California, US

Antoine Magnan
Marseilles Medical School, France

Mike Thomas
University of Aberdeen, UK

Erkka Juhani Valovirta
European Federation of Allergy and
Airway Diseases Patients' Associations (EFA)
Finland



Evidence presented at the MetaForum meeting highlighted the enormous impact allergic rhinitis can have on the lives of asthma patients, both in terms of their quality of life and management of their asthma.

Over 300 million people worldwide,¹ including over 30 million Europeans,² have asthma, and the number is rising (Fig. 1). Studies have shown that over half of asthma patients also have allergic rhinitis,³ which is associated with worse asthma control, including increased risk of asthma attacks and higher rates of hospitalisation amongst those with both conditions.⁴

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In addition, the results from a recent European survey, the "One Airway" survey, highlight the negative effect allergic rhinitis can have on the lives of asthma patients. Patients with both conditions reported disruption in daily activities including their ability to get a good night's sleep (74% of patients), participate in leisure and sports (68%), concentrate at

work/school (61%), or enjoy social activities (44%). Even patients who were "satisfied" with their treatment reported some disruption.⁵

The link between the two conditions is highlighted by the "one airway, one disease" concept, which shows that the upper and lower airways share a common pathophysiology, and that asthma and allergic rhinitis are manifestations of the same inflammatory airway disease. The link has led many physicians to believe that control of airway inflammation is critical

Recent studies have shown that the addition of leukotriene receptor antagonists (LTRAs), which target a different aspect of inflammation than steroids, can lead to improved control of inflammation in asthma patients with seasonal allergic rhinitis.⁷

and that the two conditions ideally should be treated together.

However, some asthma guidelines do not sufficiently address the impact of allergic rhinitis on asthma symptoms.

Inhaled corticosteroids can help control inflammation, however, this may not be optimal, as steroids do not influence all aspects of inflammation.⁶ Recent studies have shown that

the addition of leukotriene receptor antagonists (LTRAs), which target a different aspect of inflammation than steroids, can lead to improved control of inflammation in asthma patients with seasonal allergic rhinitis.⁷

Treatment guidelines published by the Allergic Rhinitis and its Impact on Asthma (ARIA) panel, as well as those by the International Primary Care Respiratory Group (IPCRG), recognise and address the impact allergic rhinitis can have on asthma symptoms;⁸ however, others do not go beyond mentioning rhinitis as a special consideration, and, further, lack specific guidance to physicians on treating both conditions together.⁹

Based on the evidence, and the ensuing discussion, the MetaForum panel and discussants reached consensus on several key actions that need to be undertaken, nationally and globally, in order to improve outcomes for asthma patients with allergic rhinitis.

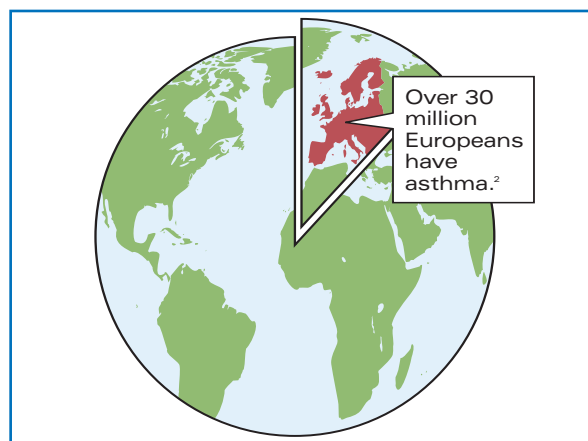


Figure 1. Asthma cases are increasing. Over 300 million people worldwide, including over 30 million Europeans, have asthma, and the number is rising.

Reaching Consensus— Summary of the MetaForum

Welcome and Charge to the Panel



Professor Stephen Holgate began the meeting by highlighting the success of the initial MetaForum meeting and the key areas for action identified, one of the most prominent actions being the need to recognise the relationship between asthma and allergic rhinitis.

Professor David Price completed the introduction by providing an overview of why allergic rhinitis is a key issue in the management of asthma and charged the panel and audience with addressing the issue: "This meeting must make a real difference for people

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– Professor David Price

highlighted the fact that many asthma patients are not assessed for allergic rhinitis despite the link between the two conditions.

In addition, panelist Professor Bachert commented that while physicians claim to know about the links between asthma and allergic rhinitis, the “one airway” concept, they are not translating this knowledge into daily practice. Furthermore, panelist Professor Kemp noted that physicians often compartmentalise patients within their own speciality, and may forget comorbid conditions that are associated with the patient’s presenting complaint, so limiting the benefits of treatment on the patient’s quality of life.

It was agreed by all that it would be useful to have a set of simple questions to enable physicians to check for the presence of other comorbid conditions in asthma patients. Such information would be useful for patients too, as they may believe that the source of their primary complaint has improved, but may not be aware that other symptoms could also be managed.

To encourage further discussion, members of the expert panel presented on topics key to asthma and allergic rhinitis:

One Airway: How Does Allergic Rhinitis Impact Asthma Patients?

Erkka Valovirta

Outcomes Research Evidence: Allergic Rhinitis Worsens Asthma

Mike Thomas

Journey into the Lower Airways in Asthma

Peter Jeffery

Asthma and Allergic Rhinitis: Role of Inflammation in the One Airway

Tari Haahtela

Breaking New Ground: Challenging Existing Guidelines

David Price

with asthma and allergic rhinitis. This meeting is an opportunity to prompt action both globally and locally in order to address this serious public health problem. By the end of the day we need a clear consensus on how we can improve outcomes for people with asthma and allergic rhinitis.”

To open up the discussion, Professor Price

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One Airway: How Does Allergic Rhinitis Impact Asthma Patients?



Dr Erkka Valovirta presented the results of a recent survey involving over 800 European patients and parents of children with asthma and allergic rhinitis. The “One Airway” survey highlighted the impact asthma and allergic rhinitis can have on patients’ health and quality of life.

Dr Valovirta stressed that allergic conditions are still underestimated, underdiagnosed, and undertreated: “Even today, patients, the public, and doctors underestimate allergic rhinitis. Many patients do not consider allergic rhinitis as a disease and so do not consult a doctor.”

Dr Valovirta continued by highlighting the fact that the majority of patients, including those “satisfied” with their medication, reported disruption in their daily activities, such as getting a good night’s sleep, due to their concomitant asthma and allergic rhinitis (Fig. 2). Patients also reported that their asthma worsened when their allergic rhinitis

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symptoms deteriorated, and 40% avoided going outside during the allergy season in case their asthma worsened.

Use of asthma and allergic rhinitis medications, along with their administration, were key concerns for many patients. The majority were apprehensive about using too much medication and almost half found it difficult to treat both conditions effectively. In accordance, many patients find it inconvenient to take different medications for their asthma and allergic rhinitis.

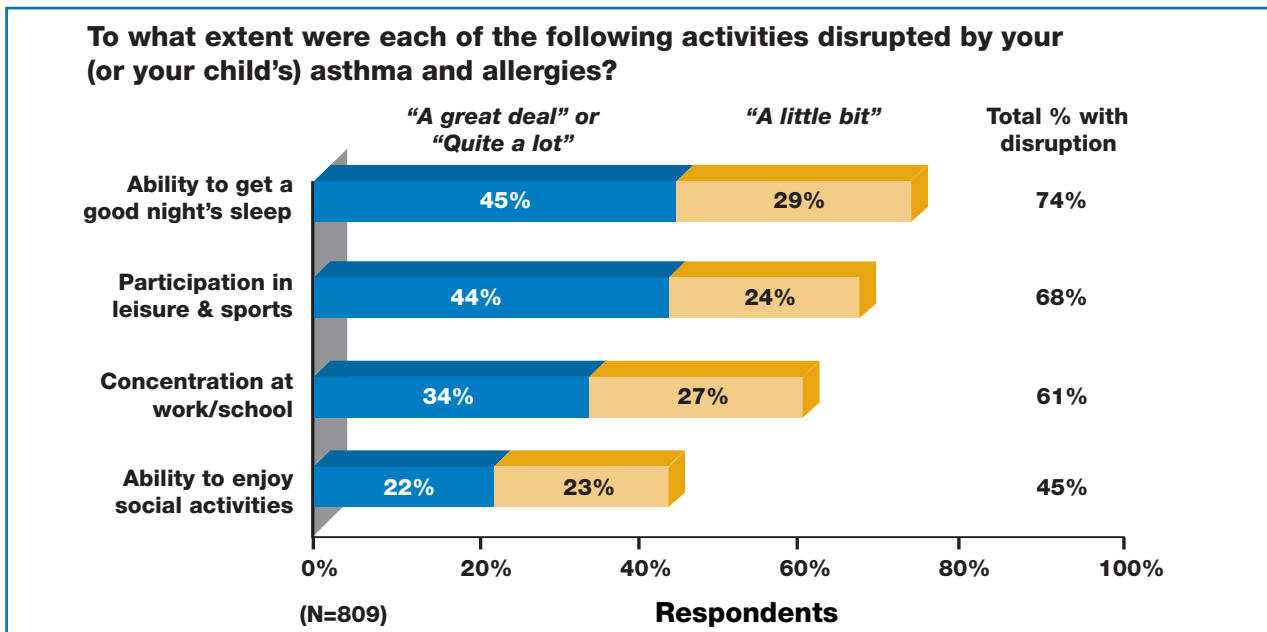


Figure 2. Patient/parent responses to quality-of-life issues in the One Airway survey

This reflected the experiences of many of the discussants, "We always find that patients with asthma and allergic rhinitis have to take many medications; they have oral inhalers, nasal inhalers, etc. The question arises as to whether we can treat them with one treatment, and how far away we are from achieving that."

Dr Valovirta summarised the unmet needs highlighted by the One Airway survey. "We still need awareness campaigns, education and training of all stakeholders,

"We need awareness campaigns, education and training of all stakeholders, establishment of allergy clinics, and national allergy programmes."

- Dr Erkkka Valovirta

ers, establishment of allergy clinics, and national allergy programmes," he stated. The faculty agreed that training of all healthcare professionals, including medical students, in allergic disorders must be addressed.

Outcomes Research Evidence: Allergic Rhinitis Worsens Asthma



Dr Mike Thomas then reviewed evidence on the impact allergic rhinitis has on the clinical management of asthma. The data presented by Dr Thomas showed that concomitant allergic rhinitis and asthma was associated with more physician visits, increased risk of hospitalisation, increased use of asthma medication, and increased drug costs. In addition, patients with allergic rhinitis and asthma had worse asthma outcomes and used

more healthcare resources than patients with asthma alone.

Dr Thomas concluded by saying, "There appears to be a strong and expanding body of evidence from a number of sources that allergic rhinitis is a marker for more severe asthma and worsened asthma outcomes. There are strong suggestions that treating comorbid allergic rhinitis may result in better outcomes."

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- Dr Mike Thomas

Dr Claus Bachert added to the discussion by stating that, as well as educating patients and physicians, politicians and funding decision makers also need to be educated on the consequences of allergic rhinitis and asthma: "Many policymakers trivialise allergic rhinitis and view it as a minor condition that can be managed by patients themselves with over-the-counter medications. They need to be made aware of the importance of treating allergic rhinitis in asthma patients and the negative socio-economic impact that could result if it is not."

Dr Thomas agreed with Dr Bachert and expanded on this further: "It is clearly shown that uncontrolled asthma is associated with greater healthcare costs, therefore, if not treating allergic rhinitis results in uncontrolled asthma, then treating allergic rhinitis will obviously be cost-effective."

Journey into the Lower Airways in Asthma



Professor Peter Jeffery's presentation steered discussion towards the biological aspects of asthma. He outlined the two major components of asthma — inflammation in the airways and changes in the structure of the lungs (remodelling). It is believed that persistent inflammation may lead to remodelling in the airways and LTRAs may impact both these processes.

Professor Jeffery also provided a brief overview of some of the cells that are involved in the inflammatory process. When inflammation is present, many cells increase in number, however, the most prominent increase is found in cells called eosinophils. The recruitment and accumulation of eosinophils in airway tissue can be attributed to several mediators, and the same mechanisms are likely responsible in both the nose and lower airways.

Asthma and Allergic Rhinitis: Role of Inflammation in the One Airway



Following on from Professor Jeffery, Professor Tari Haahtela explained how asthma and allergic rhinitis are linked by the inflammatory process and the benefits of treating both conditions together.

Professor Haahtela explained that asthma and allergic rhinitis may be seen as a continuum of disease, from top to bottom of the breathing system, which has led to the development of the "One Airway" concept.

The close link between asthma and allergic rhinitis and the "One Airway" concept suggest that both conditions may be treated together. Inhaled corticosteroids can block some inflammatory mediators but not all; cysteinyl leukotrienes are not specifically blocked by steroids and therefore some inflammation may still present, and remodelling may still occur over time.

"It is important to detect and treat inflammation early and to treat the entire respiratory tract, by combining anti-inflammatory treatments, when necessary."

- Professor Tari Haahtela Professor Haahtela fin-

Professor Haahtela moved on to present evidence which showed that the addition of leukotriene receptor blockers to standard steroid therapy led to improved control of inflammation in asthma patients with allergic rhinitis.

ished his presentation by stating: "It is important to detect and treat inflammation early and to treat the entire respiratory tract by combining anti-inflammatory treatments, when necessary."

Breaking New Ground: Challenging Existing Guidelines



The final presentation, by Professor Price, focused on current asthma guidelines in light of the link between asthma and allergic rhinitis.

Professor Price highlighted that despite there being a multitude of guidelines, the majority, up until now, focused solely on asthma. He stated that the greatest weakness of most guidelines was that they failed to explicitly cover the link between asthma and allergic rhinitis and the implications for treatment: "The weakness of virtually all asthma guidelines is that they do not cover the concept that asthma and allergic rhinitis are related and linked by one common airway. They do not mention the fact that more than half of asthmatic patients may also have allergic rhinitis, and they fail to mention that allergic rhinitis can worsen asthma or the therapeutic options available for treating both conditions (Fig. 3)."

Professor Price acknowledged that the ARIA guidelines were starting to make a difference: "The ARIA guidelines provide us with a real opportunity to improve patient care by recommending a coordinated one-airway approach."

More than half

of all asthmatic patients have allergic rhinitis

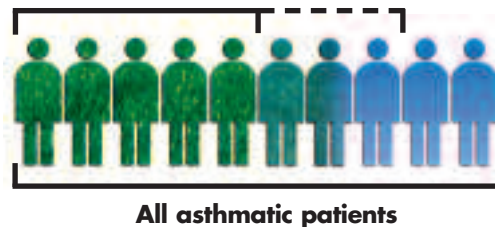


Figure 3. Epidemiologic studies support the results of pathophysiologic and clinical studies showing an association between asthma and allergic rhinitis, demonstrating that among patients with asthma, 60% to 80% also have allergic rhinitis. Adapted from Bousquet J et al *J Allergy Clin Immunol* 2001;108 (suppl 5):S147–S334; Sibbald B, Rink E *Thorax* 1991;46:895–901; Leynaert B et al *J Allergy Clin Immunol* 1999;104:301–304; Brydon MJ *Asthma J* 1996:29–32.

“The ARIA guidelines provide us with a real opportunity to improve patient care by recommending a coordinated one-airway approach.”

- Professor David Price

The panel and discussants were all in agreement with Professor Price; Professor Bonini added that many guidelines are disease-oriented rather than patient-oriented, and that the patients’ perspective also needs to be a key consideration of guidelines.

Dr Valovirta suggested that the involvement of patients and patient associations would allow the continuing development of patient-centered treatment guidelines.

The Consensus Actions

During the meeting, discussants had been asked to submit points they felt should be included and

The ARIA guidelines recognise that the upper and lower airways are affected by a common inflammatory process and recommend that asthma treatment plans may include allergic rhinitis as a key consideration.

addressed in the final consensus statement, based on the evidence and discussions that had taken place. In the final section of the meeting, the panel and discussants agreed upon the five major recommendations for action (see below) for asthma patients with allergic rhinitis.

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- Asthma and allergic rhinitis should be managed concomitantly, addressing the “one airway” concept.
- Patients and all healthcare professionals need to be educated on the combined management of asthma and allergic rhinitis.

The following attendees participated in the MetaForum meeting and supported its outcomes:

Dr Wolfgang Popp (Austria)
Professor Renaud Louis (Belgium)
Professor W De Backer (Belgium)
Vaclav Spicak (Czech Republic)
Dr Alan Altraja (Estonia)
Dr Stephane Guez (France)
Professor Adrian Gillissen (Germany)
Dr Ghristina Gratsiou (Greece)
Dr Maria Ziva Petropoulou (Greece)
Dr Giuseppe U. Di Maria (Italy)
Mr Pim de Boer (The Netherlands)
Dr Nékám Kristóf (Hungary)

Dr Reggie Spelman (Ireland)
Professor Abraham Eliraz (Israel)
Dr Gershon Fink (Israel)
Dr Maris Bukovskis (Latvia)
Dr Naseeruddin Mahmood (Pakistan)
Dr Usman Yousuf (Pakistan)
Professor Piotr Kuna (Poland)
Professor Boleslaw Samolinski (Poland)
Dr Josefina Cernadas (Portugal)
Dr Moussa Bachir Omarjee (Reunion Island)
Professor Jeana Rodica Radu (Romania)
Dr Ioana Agache (Romania)

Dr Stanislav Kajba (Slovenia)
Professor Charles Feldman (South Africa)
Dr Michelle Wong (South Africa)
Professor Refika Ersu (Turkey)
Professor Levent Tabak (Turkey)
Dr Lieske Kuitrt (UK)

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