Dermatology
challenges that get
under the skin
The skin is a mirror of what happens inside the body. This long-held belief is particularly relevant for allergic diseases in which the appearance of the skin plays a role in the diagnosis.

There is no doubt that research related to the skin has contributed substantially to knowledge in allergic diseases – not only in its findings about the skin but also in relation to the systems of other organs that share the same general pathophysiological principles.

The clinical and research contributions of dermatologists are reflected in the vibrancy of the EAACI dermatology section. In this issue, you will find coverage of several of the “hot topics” in dermatology, such as urticaria, topical treatment with non-steroidal anti-inflammatory drugs as well as angioedema and anaphylaxis. A special chapter has been provided by Maria Staevska on “Dermatitis in clinical practice” with a focus on AEDS... You don't know what this abbreviation stands for? Have a look on page 16!

You can be sure that we shall hear a lot more new and exciting research findings in this and other fields at the WAC Munich Congress, a must for all EAACI members!

Munich will also be the place of the first ever World Allergy Day. This joint initiative of the WAO and EAACI focuses on prevention and is intended to increase awareness of allergies among the public and health authorities.

In these times of restricted health budgets, it is also very necessary to make politicians understand the need for adequate treatment of allergic diseases and the enormous benefit derived from it. I count on your support for the promotion of this message and hope to see you all in Munich.

And last, but not least, the General Assembly in Munich has to elect a new Executive Committee for the coming years, including the President and the Secretary General. Read the messages of Ulrich Wahn and Antony Frew on achievements and challenges, old questions and new answers to the field of allergy and clinical immunology. Be there to contribute to the new structure and personalities of the ExCom, and vote!
Dear Friends and Colleagues,

During my term as president of EAACI I had the pleasure of working with many of you who have become active over the years in interest groups, task forces, sections or the Executive Committee.

I want to take this opportunity to thank all of you for being so helpful in contributing valuable ideas, which have strengthened our Academy. The success of EAACI is built entirely on your enthusiasm and input, which has helped our Academy to become the leader in the field of allergy and clinical immunology in Europe.

I personally consider my EAACI presidency to have been one the greatest challenges and most rewarding tasks in my professional career. Without the dedication and work of many friends and colleagues our accomplishments, which are highlighted in this issue of our Newsletter, it would never have been possible.

Sincerely,

Ulrich Wahn

What is EAACI trying to achieve?

The mission of EAACI is the advancement and dissemination of the knowledge and practice of allergology and clinical immunology for the prevention of allergic diseases and optimal patient care in Europe.
2003-2005: What has been accomplished?

Over the past two years, a breakthrough has been made with regard to representation of allergy in the European research programmes. The GA2LEN project, as a European network of excellence bringing together Europe’s best research centres, is helping to facilitate collaboration in research, develop standards of clinical service and provide better education for young physicians with an interest in allergy and clinical immunology. A second, major “integrated” project, with a focus on food allergy and known as EuroPrevall, will start in 2005.

The specialty of allergy has been developed to different levels in different European regions. Awareness campaigns on the European level were mandatory.

**Partnership**

The European Academy of Allergy and Clinical Immunology (EAACI) has become one of the GA2LEN network partners. We will join forces on:

- Improving a continuing programme of summer schools
- Providing funds for an annual meeting in Davos related to basic mechanisms of allergy and clinical immunology
- Supporting research fellowships within Europe for highly qualified investigators
- Providing travel grants for fellows in training and young investigators to participate in annual congresses.

**Improving communication**

The EAACI Newsletter with its new structure is reaching 4,372 members and health care professionals throughout Europe. Since its re-launch in July 2003, weekly visits to the EAACI website have more than doubled (Fig. 1) and 1.4 million visitors have been received. Both the newsletter and website have become powerful tools of communication not only with our membership but also with the public.

Our two scientific journals, “Allergy” and “Pediatric Allergy and Immunology”, enjoy high international reputations in their role of promoting the expertise of allergists in Europe. The contract with the publisher for both journals has been updated as acceptance by the scientific community of both journals continuously improves and citations increase.

**Membership expansion**

EAACI membership, particularly junior membership, has steadily increased in recent years. The number of delegates attending our annual congresses reached 5,000 at the Amsterdam event in 2004.

<table>
<thead>
<tr>
<th>Year</th>
<th>Membership (incl. Junior Members)</th>
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<td>500</td>
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<tr>
<td>2004</td>
<td>4,370</td>
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**Acknowledging the best**

This year, EAACI is introducing four medals to honour those considered European pioneers in developing allergy as a specialty, and who have made important contributions to basic and clinical research. They are:

- **Daniel Bovet Award** for outstanding contributions to the prevention of allergic diseases
- **Clemens von Pirquet Award** for outstanding contributions to clinical research
- **Paul Ehrlich Award** for outstanding contributions to experimental research
- **Charles Blackly Award** for outstanding contributions to raising public awareness of allergy.

**Transatlantic initiative**

Together with our partner organization in North America, the American Academy of Allergy, Asthma and Immunology (AAAAI), EAACI will initiate the “PRACTALL PROGRAMME”.

Starting this year and taking place annually afterwards, a joint workshop on specific areas of particular clinical interest will be discussed with the goal of formulating a concluding consensus statement. The most important results of the meeting will be published in the journals of both academies. The most relevant results will be presented to delegates at both AAAAI and EAACI annual congresses.

**Sponsorship**

EAACI is pleased and grateful for the continuing support of the pharmaceutical industry, particularly our Founder Sponsors. Contracts have now been signed for 2006 to 2008, guaranteeing a steady development of the Academy in the future. This provides a significant part of our annual budget.

The Academy’s public awareness initiatives, such as the Early Diagnosis Campaign, have been supported by a generous grant of Pharmacia/Sweden Diagnostics. Recently, the European Allergen Manufacturers Group (EAMG) has promised an unrestricted grant to support educational initiatives of the Academy.

**What remains to be done?**

Future challenges will require constant adaptation and new answers. The EAACI Executive Committee plans to improve its structure in order to be more efficient in serving the mission. Facilitating research, initiating new programmes for education, and improving the standard of patient care in Europe will remain on the agenda in the coming two-year term.

*Ulrich Wahn*
Stepping down with satisfaction

This is my final report to the Newsletter as Secretary General. I have had the privilege of serving EAACI in this capacity for seven years and although it is technically possible for the Secretary General to carry on indefinitely, I think it is time to step down and let somebody else take on this important role in the Academy.

It has been an enormous privilege to be part of the success of EAACI. I got involved with EAACI back in 1989 when I was invited to serve as Secretary to one of the old Sub-Committees. I then joined the Executive Committee in 1995, under the Presidency of S G O Johansson, and rapidly became involved in the planning process that led to the development of the Sections and Interest Groups. In those days the Executive Committee only met once a year and most of its business was conducted at the end of the three-year cycle when its business was conducted at the annual congress. We had our triennial congress at the end of the three-year cycle when its business was conducted at the annual congress. We had our triennial congress.

Looking back

Over the last seven years, we have achieved a tremendous amount, especially in relation to our Junior Members and summer and winter schools. I am enormously proud of the Academy’s achievements in terms of growth and lowering the average age of our membership. I think it was an inspired decision to make junior membership an increased rate of twenty-six.

I have had a hand in the planning of most of the Summer Schools over the last six years and have greatly enjoyed taking part in some of them. One of our key objectives is to increase contact between senior and junior members and there is no doubt that this is easier during a small course. Splitting up the faculty members and getting them to sit down with a different bunch of juniors each night helps both with the science and with achieving a sense of belonging for everybody. Moreover, most linguistic barriers can be dissolved in alcohol!

Eastern Europe

The other major event of the last few years has been the increasing integration of Eastern and Western Europe. I have had a personal interest in the development of Eastern Europe since the 1970s when I worked in Germany and saw at close quarters the barriers to migration across Europe. In 1999 we were able to travel, as a family, through the Baltic states and into Poland to take part in the Summer School in Bialystok. For me this was a wonderful opportunity to see at first hand how things are changing in North East Europe. We followed this up with trips to Czech Republic, Croatia, Serbia, Hungary, Rumania, Bulgaria and Russia. While the pace of change is different in the various parts of Europe, I believe we are moving in the right direction. To quote my predecessor, Sergio Bonini, we are moving towards a situation where “North, East, West and South become geographic descriptions of Europe rather than scientific ones.”

Congress

Planning our congresses is a major component of the Secretary General’s work. I have been directly involved in seven of the last eight, particularly in relation to the organisation of the free communication programme. This presents an opportunity to showcase the best work sent in abstracts. More submissions come in each year and every presenter represents a registration fee. We now have happy and successful future

Anthony Frew

Anthony Frew

the development of the Sections and Interest Groups. In those days the Executive Committee only met once a year and most of its business was conducted at the end of the three-year cycle when we had our triennial congress.

Since 1998, we have generally held three Executive Committee Meetings each year and the Secretary General’s job has expanded considerably. Every few months, I assemble the paperwork that has come in and put it together for the ExCom Meetings. Seven years ago, this meant photocopying twenty-five sets of papers, punching holes in them, and assembling a physical document that was mailed out to everybody ten days in advance. Nowadays, almost everything arrives by e-mail and we put together the entire agenda without photocopying a single sheet. Although this sometimes means more work, with several revised versions of documents sent out, seeing the projects move from the initial idea through the committees and then out into the real world gives a tremendous sense of achievement.
Website & awards

Seeing is believing

The visual way to knowledge, or thoughts on how to use a website

In the last two years, the EAACI website has been transformed from an adventure to a validated experimental model.

Let me explain: in the revolutionary times of the rapid expansion of on-line information, new and old communication systems are trying to redefine themselves, find niches and new markets, attack the competition and defend their own space.

The reliability of information, the reference procedures, the reviewing processes, the limits between science and journalism are scrutinised much more closely. In the future, these issues will be solved and the mature environment taken for granted. For the time being, however, it is through market dynamics, offers, demand, trial and error, promotion and opinion polls that every attempt has to be juggled.

So, eaaci.net was initially an adventure of putting ideas into effect through a mixture of intuition, hope and incidental knowledge. At the same time, every move was assessed with respect to reactions from the membership. We were interested not only in being liked but also in finding the reasons why we are liked – or not liked. This is fun nowadays as one gets more information than one actually needs. For example, eaaci.net users work until late; the traffic falls only after midnight! In May, visitors from Italy moved about a little but downloaded much; the opposite happened with the Swedes.

Position papers continue to receive high, steady attention. Not all this information necessarily means much but it stimulates thoughts as steps towards improvement. This might be happening. In absolute numbers, the site’s traffic has been increasing in a steep linear curve. And now we know that we can assess whether the tricks work or not, and therefore, we have a nice experimental model.

Which leads me to the important point that I wanted to reach from the beginning: this year more will come, with new areas and tools in the pipeline. They include educational and self-assessment materials, case reports and interactive discussions, databases and more. Thanks to the Web team, the developers, and especially Irene – eaaci.net’s heart – this experiment may grow to match the vision we have of a true scientific reference tool.

Nikos Papadopoulos
EAACI website editor

The European Centre for Allergy Research Foundation (ECARF) and the Dermatological Research Association (ADF e.V.) have awarded the first “ADF/ECARF Award for European Allergy Research” in an effort to motivate further research in the field of allergy. ECARF’s goal is to increase knowledge and awareness of allergies in Europe.

Research teams at GA’LEN centres in Vienna and Munich have been chosen for the award. One is lead by Prof. Dr. Erika Jensen-Jarolim from the Medizinische Universität Wien, Vienna Medical University. This team received an ADF/ECARF Award for a clinical study indicating that gastric acid inhibitors can provoke food allergies. The second went to the two research teams in Munich, namely that of Priv.-Doz. Dr. Thilo Jakob from the ZAUM Center for Allergy and Environment, Technische Universität, and GSF Research Centre for Environment and Health in Munich. These teams received an ADF/ECARF Award for their experimental studies on different dendritic cell subsets as anti-allergic tools to induce allergen specific tolerance.

The prize winners were chosen during the 32nd annual meeting of the Arbeitsgemeinschaft Dermatologische Forschung, 3-5 March 3-5 2005 in Innsbruck.

Each team received 2,500 Euro. The awards will be announced again in 2006 (for details see www.ecarf.org).

Stefanie Link,
ECARF Press Center, Berlin

Awards for dermatology

Irene Andriopoulos - Nikos Papadopoulos

The visual way to knowledge, or thoughts on how to use a website
2005 WAC Munich Congress:
Global change & allergy

Europe and the world come together in the joint XIXth Congress of the World Allergy Organization (WAO) and XXIVth Congress of the European Academy of Allergology and Clinical Immunology (EAACI), Munich, 26 June – 1 July 2005.

Does the fact that the world is changing in many ways - politically, economically, culturally, meteorologically - have anything to do with allergy? So far, nobody can explain the dramatic increase in allergy prevalence over the last 50 years; various hypothetical concepts will be discussed at the World Allergy Congress Munich 2005.

The congress will offer more than 2,000 presentations. This includes over 1,600 free communications and the more than 400 persons involved in symposia, workshops, “Meet the experts” sessions and so on will reflect the state of the art and the current problems in our field all over the world.

Allergy is no longer a problem of industrialised countries only. There are high prevalence rates of atopic eczema and severe asthma in developing countries. We just have not looked for it so closely until recently. Special sessions led by C. Baena-Gagnani will be dedicated to the “global trend in allergy prevalence” and hypothetical concepts in explaining its increase.

Greater pollen exposure

Environmental influences play a major role, both those that are from natural and anthropogenic origin. As well as a loss of protective factors (e.g. TH1 stimulating bacterial products) acting together with TH2 enhancing stimuli from anthropogenic source (ultrafine particles from traffic exhaust, volatile organic compounds, etc.), the quality and quantity of allergen exposure is often overlooked. Yet it represents the major causal influence in allergy development! It is now known that in many countries in the northern hemisphere the pollen season has increased in length by 2-4 weeks. This implies a longer lasting exposure to pollen and pollen allergens. Furthermore, we will learn from H. Behrendt that pollen are not only allergen carriers, but also release highly active biolipids (pollen associated lipid mediators PALMS), which are pro-inflammatory and at the same time influence dendritic cells in a shift towards TH2.

Several sessions led by E. Bleecker on the genetics of allergy will describe the latest findings regarding the association of gene loci with phenotypes of atopy and atopic diseases. Basic immunology sessions will cover all new aspects associated with the first contact of the allergen with the dendritic cell and its presentation to the T cell.

Plenaries

In a plenary lecture by U. von Andrian, a film will show the dendritic cell/T cell interaction with the antigen presenting a “kiss”? You will hear the latest on regulatory T cells from S. Romagnani.

Nobel laureate John Deisenhofer will introduce us to brand-new aspects of signal transduction in cell biology.

EAACI President Ulrich Wahn will remind us that allergy is not only a localised disease of one mucous membrane or the skin but also one that changes during life. This will be made clear in several symposia highlighting the concept of “united airway disease”, and especially in the presentation of J. Deburg, which will highlight that allergy affects the whole body and starts in the blood.

Debates

There will be three “debate of the day” sessions addressing the following questions:

■ Does allergy prevention through nutrition make sense?
■ Which is better: sublingual or subcutaneous immunotherapy?

Continued overleaf
Does allergen avoidance at home have any benefit?

The debates will be held in the open air. The combatants will face each other from podiums like at “speakers’ corner”. They will argue without the help of slides and an independent referee will step in, like in a boxing fight, should the debate become unfair in any way. Some of the topics are so controversial that some sets of opponents may decide to draw straws on who is “pro” and who is “con”.

Social events

The opening ceremony will feature Bob Ross and his group “Blechschaden”, a famous Munich philharmonic brass orchestra, as well as the opening speeches and welcome addresses.

The “All Congress Event” on the Monday evening will give the participants the unique opportunity to spend several hours visiting Munich’s three major art galleries, which are located within walking distance of the city centre. Between the galleries, there will be a big tent serving food and drinks to accompany the spiritual nutrition of works of art.

Many of the companies sponsoring the event are offering additional social events. Visit their booths and listen for opportunities for tickets. A limited number of tickets are also available for a Bavarian evening.

For those who stay until the very end, a specially designed closing ceremony will provide the round up to this summer week in Munich dedicated to the many scientific, clinical, practical and political efforts aimed at improving the life of our allergic patients!

Johannes Ring
Chairman Host Organizing Committee

Get active for World Allergy Day

To help you prepare for World Allergy Day on Friday, 8 July 2005, I hope you will join us in Munich for an advance launch.

World Allergy Day
8 July 2005

From 13.30 to 15.00 on Tuesday 28 June 2005 in Room 21 ICM, a preparatory symposium and press conference will be held. During this session, the World Allergy Organization (WAO) and EAACI will officially announce World Allergy Day to the media and answer any media and national society questions.

The theme of this first ever World Allergy Day will be prevention. WAO and EAACI hope this initiative will contribute to increasing the visibility of allergy among the public, health care authorities, and other related specialties. The two organizations are delighted to have the opportunity to launch the event as an associated activity of the biennial World Allergy Congress.

To assist national societies in planning local celebrations of World Allergy Day, a kit is available online at WAO website http://www.worldallergy.org/wad2005/index.shtml It includes:
- General instructions
- Sample proclamation
- Sample media advisory information, news release and article for a newsletter
- Allergy and allergic asthma statistics sheet
- National data on the allergic disease prevalence
- World Allergy Organization guidelines on the prevention of allergy and allergic asthma, including an article, patient sheets and sample presentation
- Evaluation form.

We have asked the EAACI national societies to begin translating these materials as necessary and to add national data where possible. An online discussion forum will soon be available and will be accessible from the World Allergy Day section of the WAO Web site.

At the ICM foyer, there will also be a WAO World Allergy Day exhibit booth where materials will be available.

I look forward to seeing you in Munich and to the successful celebration of World Allergy Day.

Best regards,

Ulrich Wahn,
EAACI President
EAACI Newsletter

News in brief

Schools planned in Rotterdam & Prague

**GA2LEN** and **EAACI** are organizing two “Summer Courses” in 2005. The first will be in Rotterdam, 27-31 August, entitled “Asthma and Allergy: bridging the gap between basic and clinical science”. The second will be held in Prague, 10-14 September, covering “Allergy - from basic immunology to clinical care”.

EAACI and GA2LEN will continue to jointly organize these training sessions, to be known as the “GA2LEN/EAACI Summer Courses”. The name does not necessarily imply that the activity needs to take place during the summer. A major advantage of these courses, besides the high-quality lectures, is that they give individuals from different European countries the possibility to interact with one another.

Summer Courses are a highly prioritized activity of the GA2LEN Network of Excellence. The aim is to spread current clinical and scientific knowledge in the field of allergy among clinicians and scientists, primarily of younger ages. The plan is for GA2LEN and EAACI to collaborate closely in arrangements for 2-3 courses per year. The programmes may either be strictly scientific, strictly clinical, or sometimes of mixed content. They will vary in length from 3-5 days and are organized either at GA2LEN partner venue or at a venue that is outside the network of excellence.

Participants up to the age of 35 years can apply for a travel grant to attend a course. The award of approximately 150-300 Euro is payable on attendance. Those awarded grants will be refunded the registration fee when they receive the travel grant. Otherwise, the registration fee is 150 Euro per summer school course. For more information about the GA2LEN/EAACI Summer Schools please visit: www.GA2LEN.org/SummerSchools2005 or www.eaaci.net

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**Jan Löstvall**,  
GA2LEN / EAACI Summer Course Task Force Chairman

AAAII Annual Meeting: Delegates applaud new session formats

More than 5,000 delegates experienced an outstanding educational programme at the Annual Meeting of the American Academy of Allergy, Asthma and Immunology (AAAAI). It took place 18-22 March 2005 in San Antonio, Texas. Delegates found a good balance of clinical, translational and basic science sessions throughout the over 400 educational sessions.

“Our 2005 Annual Meeting delegates voted with their feet, and based on preliminary attendance numbers, the new sessions greatly exceeded the expectations of the planning committee,” said Zuhair K. Ballas, MD, FAAAAI (Fellow of AAAAI) and Chair, 2005 Annual Meeting Program Committee (AMPC). “The planning committee is pleased by the enthusiasm and encouragement displayed by Annual Meeting delegates.”

The overall theme of the 2005 Annual Meeting was the impact of basic research on clinical practice. Sessions began with highlights of the latest developments in a particular area and ended by relating those developments to clinical disease and patient care. Global issues pertinent to the specialty were addressed in new formats such as the keynote address, State-of-the-Art Sessions and Pro/Con Debates.

**Conference features**

- High profile keynote speaker: Leroy Hood, MD, one of the world's leading scientists in molecular biotechnology and genomics, presented a special one-hour keynote session, Systems Biology and Predictive Medicine.
- “Dr. Hood’s presentation was very thought provoking,” Ballas said. “He challenged members of the audience to consider not only the exciting and futuristic developments in medicine, but how we can change the way we teach medicine to younger generations.”
- More plenary sessions: The enormous success and positive delegate feedback from previous plenary sessions led the AMPC to expand this part of the programme in 2005.
- State-of-the-Art Sessions: Each interest section designed a state-of-the-art session for the Annual Meeting.
- “Many were standing-room only, and early feedback suggests that delegates enjoyed having an expert in the field give an overall view of a particular topic,” Ballas said. “This format allowed delegates to appreciate the relevance of the issues raised in the oral abstract sessions.”
- Concurrent interest section

Continued overleaf
Under-35s made welcome at Munich

A warm welcome awaits young investigators and allergists at the World Allergy Congress. We are delighted to present our programme to the world.

Next year

The 2006 AAAAI Annual Meeting will be held in Miami Beach, Florida, 3-6 March 2006. The theme will be “The Scientific Basis of Allergy Practice.”

Miami Beach is a vibrant, cosmopolitan and colourful destination with excellent convention centre facilities and a spectacular array of unique venues for AAAAI special events. Details regarding the 2006 Annual Meeting will be available soon.

Visit the Annual Meeting Website, www.annualmeeting.aaaai.org, for more information.

Poster session

More than 180 junior members will participate in their own poster session. As usual, the Junior Member Poster Session will be held in parallel with the welcome reception on the opening evening of the congress (Sunday, 26 June 2004, 19.30-21.00, Chaired by Philippe Gevaert and Ulrike Raap). Posters are exclusively presented by junior members and ten poster prizes sponsored by Pharmacia Diagnostics will be awarded for outstanding presentations.

Social event

At 21.30 on the first evening, the Junior Member Social Event starts in a former bathhouse. In this relaxing atmosphere, there is time for lengthy discussion at the bar or while taking snacks on the terrace. There will also be an opportunity to dance in the empty swimming pool. The event is free to all junior members and transportation is organised from the ICM poster area. Public buses run every 30 minutes to the city centre and hotels where junior members are staying.

Symposium

On Thursday 30 June 2005 at 13.30, the Junior Member Symposium will focus on: “Allergy: nature or nurture?” It will be chaired by GJ Braunstahl and P Hellings.

Presentations will be given as follows:

- Bart Lambrecht (NL): Allergy: nature or nurture?
- Bel Elisabeth (NL): The role of infection in asthma and allergy
- Vermaelen K (BE): Immune responses in extreme environments: lessons from space-flight studies
- Raap Ulrike (GE): Neutromodulation and allergy

Educational session

The Educational session on “Biostatistics: What you should (not) do!” will take place at 15.30 on Thursday 30 June 2005. It will be chaired by Nina Blumchen and Stefano Del Giacco and divided into two parts:

Part I: How to make the most of your paper and presentation! Anthony Frew (UK)

Part II: Don’t be fooled by the results: Introduction to understanding statistics in medical research. Thomas Keil (GE)

Business meeting

This will be followed by a business meeting (17.00) including a presentation of the new Junior Member working group. All members under 35 years are welcome to come and hear about activities, summer schools, travel grants and educational grants, and to offer ideas or support.

Elections

During Autumn 2004, a successful call produced candidates for the posts of JMA representatives for immunology, dermatology, asthma and pediatric sections and a webmaster. In April, JMA’s were able to elect five new members to the working group. These elected representatives will be presented at the Munich meeting and start work immediately after the Junior member business meeting. They are:

- Dermatology: Dr E Borzova, Russia
- Immunology: Dr M Kurowski, Poland
- Asthma: Dr D Gorneberg, Germany
- Pediatrics: Dr L Borrego, Portugal
- Webmaster: Dr C Skevakic, Greece

Other activities

Junior Member corner, booklet about junior membership, “get together” every evening at a designated hotel, and daily jogging.

News in brief

Under-35s made welcome at Munich
Sections and Interest Groups

Pediatricians announce Prague

The Czech Initiative for Asthma is organizing a joint meeting of the Pediatric Assembly of the ERS and the EAACI Section on Pediatrics. The Joint Meeting on Asthma will take place in Prague on 12-15 November 2005. It continues a tradition of bringing together pediatricians working in the fields of allergy and clinical immunology and pediatric respirology.

The topics covered will include neonatal lung disease, smoking – respiratory and allergic consequences, various aspects of food allergy, the child at school, adolescents, and asthma guidelines.

Successful joint meetings in the past have proved the importance of bringing these closely related disciplines together as they are often addressing the same problems. Co-operation and scientific communication between pediatric allergists and respirologists are extremely important for patients and for scientific progress in pediatrics.

Jorrit Gerritsen, Chair, PA ERS, Petr Pohuneck, Chair, Organizing Committee, and Philippe Eigenmann, Chair, SP EAACI look forward to seeing you in Prague.

IG Genomics

The interest group in functional genomics and proteomics aims to provide a platform for researchers in the field to exchange ideas and start collaborations. Specific aims are to develop a standardized protocol for microarray studies as well as to have a symposium and a workshop at the 2006 EAACI conference in Vienna. Another objective is that functional genomics and proteomics should become an abstract topic at EAACI conferences.

The development of a standardized protocol for microarray studies will be discussed at the IG Business meeting at 11.30-12.30 on June 26 in Munich. A first objective is to form a reference group with representatives from different countries who can contribute to the protocol and later serve as reference persons to IG members. A symposium entitled “Functional genomics and proteomics in allergy research - will it affect clinical practice?” as well as a workshop on “Successful strategies for microarray studies in allergy research” will be held during the 2006 EAACI conference in Vienna. Functional genomics and proteomics has been accepted as an abstract topic at the conference. Please start planning your abstracts to send to the conference.

The figure below shows how gene expression data can be arranged in networks such as demonstrated in this model of the IL-4 receptor network (Clin Exp Allergy 2004; 34:1001-6).

Insect venom hypersensitivity

Mark Jutel, Chairman and M. Beatrice Bilò, Secretary of the Interest Group on Insect Venom Hypersensitivity have provided the following summary of recent activities.

Two position papers have been submitted for publication. One deals with venom hypersensitivity diagnosis and the other with therapy. The lengthy and difficult process started in 2003 when two separate Task Forces involving around 15 Interest Group specialists were established. Previous position papers had been drawn up in 1993 (Venom Immunotherapy), 1995 (Adrenaline for emergency kit) and 1996 (Sting challenge).

Multicentre study on mastocytosis and Hymenoptera Allergy is in progress. The project, drafted mainly by Dr. F. Rueff, is an open, multicentre, prospective observational study involving 16 centres located all over Europe. More than 500 patients are included. The study is intended to assess the risk associated with three situations: elevated mast cell tryptase levels in serum for the severity of sting reactions; occurrence of systemic side effects during the dosage increase phase of venom immunotherapy, and VIT failures. The study was initiated in 2002, when a one-year inclusion phase began. It will end in April 2006 after the three-year study has been completed.

Website pages on Insect Venom Hypersensitivity have been improved by Dr. Sanches. It includes text from Insect Allergy brochures and the minutes of meetings of the Interest Group.

Plans for Munich include a workshop on “Current problems in Insect Venom Allergy” will be held on Friday, 1 July (8.30-10.00) and a session of Oral Free Communications on “Insect Venom Hypersensitivity” will be held on Thursday, 30 June (15.30-17.00). Both sessions are organised jointly with the Munich host Organising Committee.
GA²LEN’s first annual conference

The Conference of the flagship European Network on Allergy and Asthma, GA²LEN, took place on Tuesday 19 April at 10.00 am at Holiday Inn, Ghent Expo, Belgium.

Allergy increases blamed on environmental changes

Research into why half of all Europeans will have developed allergies by 2020 is focussing on environmental factors, such as air pollution and food quality.

Speaking at GA²LEN’s first annual meeting (18-19 April 2005), Prof. Paul van Cauwenberge, Coordinator of GA²LEN (Global Allergy and Asthma European Network), reminded the audience that the past 40 years have witnessed a dramatic increase in the prevalence of allergic diseases and asthma. “Over 50% of the population of Europe is likely to be allergic within the next 10-15 years,” he says. The increases will not only take place in Western Europe but also in poorer countries. “Environmental factors play an important role in altering host resistance to respiratory diseases in childhood. It is likely that the accessions of a number of former Soviet Union countries to the European Union will be accompanied by changes in the patterns of disease among children in those countries.”

Professor van Cauwenberge believes that at the end of its first year, the GA²LEN “network of excellence” is already on track to create a structure that will maximise Europe’s scientific contribution to controlling allergy and asthma. European Commissioner for Science and Research, Janez Potočnik demonstrated his interest in GA²LEN’s work through his participation in the meeting in Ghent. He explained that allergy and asthma are an important part of European Research on health-related research in his presentation entitled: “Allergy within the European Research Programme.”

The joint research programme to be implemented throughout the network will address issues in relation to their effect in different life stages and steps in disease progression. One of the most promising research areas to be described at the meeting was the work on the exposure to infections in early life. Professor Erika von Mutius from the University Children’s Hospital Munich, Germany, described how increased exposure to infections leads to protective effects on asthma and wheeze. Her paper reported that children growing up on dairy farms have a significantly lower prevalence of allergic diseases, with the exception of eczema and positive allergy tests. “Contact with stables and barns and the consumption of non-pasteurised milk was found to explain much of the relationship between farming and allergies.” The timing of farm exposure is crucial to the protective effect. Children need to be exposed in the first year of life, and mothers should ideally have exposure to farm animals during pregnancy and lactation.

Pooling excellences

Professor Peter Burney from King’s College London, one of the centres involved in GA²LEN, described three areas of environmental research being undertaken by the network. One is the influence of indoor and outdoor air pollution on allergic and asthmatic patients. He said that this is “already an area of excellence in European research.” He believes that new findings will provide an important basis for developments in “evidence-based” policy.

A second important area of research to be highlighted is occupational hazards, including the exposure of office workers and health care personnel to cleaning agents. A review of the effects of cleaning products on the development of asthma has just been completed and will be published shortly.

A third subject of environmental research is the quality and safety of food. The quality of European food is recognised to be deteriorating. “This is a known contributor to asthma.” Professor Burney says. GA²LEN research is concentrating on which aspects of the changing diet is associated with the observed increases in allergies.

Professor van Cauwenberge says. He pointed out that the prevalence of asthma and allergies among teenage children varies from 32% in the UK to just 2.6% in Albania. GA²LEN’s first year of activity has provided partners with numerous opportunities to exchange during symposia and meetings, as well as via a regular newsletter and intranet communication within a new website, and during two summer schools.

A second way in which GA²LEN is helping to overcome the European research community’s limitations is through the recent establishment of a research platform that will help standardise methods for epidemiological surveys, common basic research and clinical trials. Once fully established, the results of studies in different European countries will become more fully comparable.

All new and ongoing research projects also benefit from the support of specialist sections within the network dealing with gender, ethics and the role of intellectual property rights in patent and product development.

The first 12 months of GA²LEN’s life has produced concrete developments, including a research platform, several opportunities for partners to meet, the launch of a website and intranet, and a summer school programme. Little wonder then that the first annual report concludes: “GA²LEN is on track to create a permanent and durable structure that will maximise Europe’s scientific contribution in the area of allergy and asthma.”

www.ga2len.net
**Common guidelines on Urticaria**

More than 400 delegates took part in the interactive panel discussions and consensus protocol review involving the definition, classification, routine diagnosis and management of urticaria. The original protocol, published after the First International Consensus Meeting in 2000, was thoroughly revised on the basis of recent developments. The new guidelines have been accepted by the European Dermatology Forum (EDF) and will shortly appear in the Journal of the European Academy of Allergy and Clinical Immunology “Allergy”.

**Consensus protocols were revised at the Second International Consensus Meeting, Urticaria 2004, which took place at the Charité University Hospital in Berlin, Germany, 1-2 October 2004.**

Urticaria has a profound impact on the quality of life, effective treatment is important. Therefore, specific treatment options on management of urticaria are evaluated using the Methodology Checklist 2 for Randomized Controlled Trials of the Scottish Intercollegiate Guidelines Network (SIGN).

### Treatment

Non-sedating H1 antihistamines are recommended as first line treatment. They have proven effective in double-blind controlled studies. Dosages over those recommended may be necessary. However, additional or alternative therapies may be required for different urticaria subtypes and in view of individual variations in the course of the disease and its response to treatment. Immunosuppressive drugs like corticosteroids are not recommended for long-term treatment due to unavoidable, severe adverse effects.

Very important is the new consensus on the classification and the proposed scoring system, which helps ensure comparability of results (see table 1 and 2).

**Table 1: Classification of Urticaria**

<table>
<thead>
<tr>
<th>Group</th>
<th>Subgroup</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spontaneous</td>
<td>Acute urticaria</td>
<td>spontaneous wheals &lt; 6 weeks</td>
</tr>
<tr>
<td></td>
<td>Chronic urticaria</td>
<td>spontaneous wheals &gt; 6 weeks</td>
</tr>
<tr>
<td>Physical urticaria</td>
<td>Cold contact urticaria</td>
<td>eliciting factor: cold air/ water/wind (wheals arising with a 3 – 8 hour latency)</td>
</tr>
<tr>
<td></td>
<td>Delayed pressure urticaria</td>
<td>eliciting factor: vertical pressure (wheals arising after 1 – 5 minutes)</td>
</tr>
<tr>
<td></td>
<td>Heat contact urticaria</td>
<td>eliciting factor: localized heat</td>
</tr>
<tr>
<td></td>
<td>Solar urticaria</td>
<td>eliciting factor: UV and/or visible light</td>
</tr>
<tr>
<td></td>
<td>Urticaria factitia/</td>
<td>eliciting factor: mechanical shearing forces (wheals arising after</td>
</tr>
<tr>
<td></td>
<td>dermographic urticaria</td>
<td>1 – 5 minutes)</td>
</tr>
<tr>
<td>Other urticaria</td>
<td>Aquagenic urticaria</td>
<td>eliciting factor: water</td>
</tr>
<tr>
<td>disorders</td>
<td>Cholinergic urticaria</td>
<td>elicitation by increase of body temperature</td>
</tr>
<tr>
<td></td>
<td>Contact urticaria</td>
<td>elicitation by contact with urticariogenic substance</td>
</tr>
<tr>
<td></td>
<td>Exercise induced anaphylaxis</td>
<td>eliciting factor: physical exercise</td>
</tr>
</tbody>
</table>

Urticaria 2004 was a joint initiative of the newly-established European Centre for Allergy Research Foundation (ECARF) in collaboration with the EAACI Dermatology Section and GA’LEN. By promoting the development of updated guidelines on urticaria, these organizations and programmes are pursuing the common aim of standardized, evidence-based management of allergic diseases.

A significant number of young scientists and clinicians reported new data in oral presentation sessions, and lively discussions on the different, fascinating faces of urticaria followed. The competing hypotheses about infectious and autoimmune genesis of urticaria were discussed. Both are still being debated. The importance of “quality of life” studies on urticaria with the help of validated questionnaires was pointed out. Finally, cases of anaphylactic reactions to different substances and successful treatment possibilities were reported.

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**Table 2: Assessment of disease activity in urticaria patients**

<table>
<thead>
<tr>
<th>Score</th>
<th>Wheals</th>
<th>Pruritus</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>1</td>
<td>Mild</td>
<td>Mild</td>
</tr>
<tr>
<td></td>
<td>(&lt; 20 wheals / 24h)</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>(21 - 50 wheals / 24h)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Intense</td>
<td>Intense</td>
</tr>
<tr>
<td></td>
<td>(&gt; 50 wheals / 24h or large confluent areas of wheals)</td>
<td></td>
</tr>
</tbody>
</table>

Torsten Zuberbier, Secretary, Dermatology Section
Finding a balance on precaution

The following article sets out the common position of EAACI’s Dermatology Section and Pediatric Section regarding decisions of the US Food and Drug Administration (FDA) on the risks of Pimecrolimus and Tacrolimus in the treatment of atopic dermatitis.

Background

In the United States, the Food and Drug Administration (FDA) has announced that it is intending to issue a warning on the topical use of Pimecrolimus and Tacrolimus in dermatology, stating that the application of these products might possibly induce skin tumours and lymphomas. This announcement has been criticised by several medical societies in different parts of the world because no clear evidence exists to support the claim. It has created fears in many patients, especially in those with atopic dermatitis. Imprecise and non evidence-based warnings are more likely to increase anxiety within a patient group that is already afraid of side-effects. The tendency therefore is to undertreat the disease leading to high individual and socio-economic consequences.

Review of evidence

There is no evidence for potential, carcinogenic side-effects in humans from Pimecrolimus and Tacrolimus. Both drugs are registered for topical use. In several studies, covering nearly 40,000 patients, these drugs have been shown to be effective and safe in the treatment of atopic eczema.

Since registration, more than 7.5 million patients have been successfully treated with topical application of Pimecrolimus and Tacrolimus. In only a few patients have transient, very low systemic levels been measured, which are far lower than those known to inhibit systemic immune functions. Neither an increase of systemic infections nor a reduced immune response after vaccination has been observed. In clinical studies, the incidence of skin tumours and lymphomas was lower than in the control groups. In post-marketing surveillance, fewer tumours have been reported than would be expected in the general population of untreated patients. In reported cases of skin tumours and lymphomas, the causal relationship could not be shown in a single case. Independent experts regarded the likelihood of a causal relationship extremely low. The cases did not fit with what is already known about possible skin tumours and lymphomas induction in severely immuno-suppressed patients after organ transplantation.

It was only in an animal study, in which excessively high amounts of the substances were administered systemically, that an increased rate of lymphoma induction was seen. For topical substances that do not, or hardly, penetrate the skin, such a model is not generally accepted in risk assessment.

German response

The German Dermatological Society responded to the US announcement in a press release: “Unfortunately, the planned warning to be issued by the US Food and Drug Administration does not take into account established evidence in its considerations and should therefore be rejected. The German Dermatological Society is against this warning because there is no scientific justification for it. There are fears that it will lead to unjustified uncertainties in patients, their families and health carers. The risk is that patients will be unjustifiably deprived of a highly effective and – based on the recent standard of knowledge – safe treatment option.”

Conclusion

From a medical perspective, it is always essential to use the most refined and safe treatments to ensure that patients have optimal well-being. The assessment of risks is a serious responsibility of both the treating physician and the administrative authorities. An unwarranted warning is as dangerous as not giving a warning of a known risk. Authorities and physicians should adhere to well-established evidence.

Both the Dermatology Section and the Pediatric Section of The European Academy of Allergy and Clinical Immunology (EAACI) regard the current indications for use of Pimecrolimus and Tacrolimus as safe and adequate. We believe that the benefits provided by Pimecrolimus and Tacrolimus in the treatment of atopic dermatitis in many patients should not been restricted by recommendations exclusively based on “precautionary labelling.”

Carsten Bindslev-Jensen
Chair, Dermatology Section

Torsten Zuberbier,
Secretary, Dermatology Section

Philippe Eigenmann,
Chair, Pediatric Section

Ulrich Wahn,
President EAACI
Urticaria and/or angioedema & anaphylaxis

Urticaria (hives, nettle fever) is a common condition. Urticaria typically presents as a generalized itchy eruption with erythematous circumscribed borders and pale, slightly elevated centers. Angioedema is characterised by an non-erythematous swelling, often involving the eyes or the lips, usually without itch.

Urticaria and/or angioedema is classified as either acute or chronic. Chronic urticaria is defined as continuous or of frequent occurrence for more than 6 weeks.

Acute urticaria and/or angioedema in children is mostly caused by foods and viral infections, but may also be caused by wasp or bee stings and drugs. Other non-allergic causes include physical triggers such as cold, heat, physical exercise and others.

Any drugs may cause urticaria and/or angioedema on an IgE-mediated basis, and most reactions are seen against penicillin and other antibiotics.

Acute urticaria and/or angioedema are also the most common early manifestations leading to anaphylactic reactions.

Chronic urticaria and/or angioedema are rarely caused by a specific allergen. Most often, the initial trigger may be an infectious disease leading to recurrent hives for several weeks, or months.

Only rarely another origin might be relevant. If foods are suspected, initial investigations might include a food diary, and selected allergy tests.

In any case, it is strongly suggested to investigate chronic urticaria and/or angioedema (if severe or lasting more than a few months) in collaboration with an allergy specialist.

Anaphylaxis is a potentially fatal multisystem allergic reaction resulting from a massive release of inflammatory mediators due to triggering by allergens, such as foods or stinging insects. Anaphylaxis may be caused by any allergen, but latex or drugs are more rarely causing anaphylaxis in children.

The symptoms often have a rapid and severe onset, mostly occurring within a short time after the exposure to the offending allergen. The typical symptoms start with a feeling of distress and discomfort, often followed by feelings of creeping in the hands and feet. Cutaneous symptoms such as urticaria and angioedema, flush, generalized itch develop rapidly in combination with typical symptoms of the respiratory tract (dysphonia and wheezing, swelling of the tongue and throat, dysphagia and choking). Gastrointestinal symptoms, such as vomiting, abdominal pain and cramps might occur. Cardiovascular symptoms (tachycardia, arrhythmias, hypotension) with sense of impending doom suggest a severe reaction.

Any patient with anaphylaxis should as soon as possible receive an appropriate treatment including adrenaline and should be closely observed in an emergency setting for relapsing symptoms during the next few hours.

Subsequently, patients with a history of anaphylaxis need to be referred to an allergy specialist who will investigate the cause of the reaction, prescribe a set of emergency medication in case of another reaction, and provide the patient and family with information.

Fatal anaphylaxis in children remains exceptional, but several children die every year in each European country, due to this condition.

Major efforts should be made to address such dramatic outcomes, which could in most cases have been prevented by adequate patient education.

Viral infection very often causes urticaria in young children, and allergy to antibiotics are often wrongly suspected as the cause of these reactions. Acute urticaria without other organ symptoms rarely progresses to anaphylaxis. A history of asthma is a major risk factor for severe reactions to foods, even when urticaria is the only clinical manifestation!

### Urticaria and/or angioedema and anaphylaxis

#### What to look for
- Severity of urticaria or anaphylaxis
- Airway obstruction?
- Look for triggering factors
- Stop causative agent if applicable (e.g. medication)?

#### Treatment
- For urticaria: administer antihistamines. Steroids and adrenalin are not indicated.
- For chronic urticaria: continuous treatment during 6 weeks with a non-sedating antihistamine is suggested.

#### Parental/Patient education
- Information on triggering factors and avoidance of such allergens if possible
- Training to use emergency medication when needed

Identify offending allergens by testing

From the new brochure “Is it Allergy?”, disseminated within the Early Diagnosis Campaign and developed by the EAACI Pediatric Section
Dermatitis in clinical practice

Atopic eczema/dermatitis syndrome (AEDS) is one of the major problems in the practice of the allergologists. Atopic dermatitis is a chronic, relapsing skin disease characterised by pruritus, a predilection for the flexural areas, and a personal or family history of atopy.

The following brief reports are taken from presentations during the session at the EAACI Annual Conference in Amsterdam 2004 on “Atopic eczema/dermatitis syndrome (AEDS): The clinical point of view”.

Questioning the myths

The first speaker was Professor Thomas Diepgen who presented evidence that may put doubts on four previously held beliefs.

Are rates increasing?

First, he addressed the issue of whether the prevalence of AEDS was increasing. Most studies have provided strong evidence that the prevalence of atopic dermatitis (AD) has increased over the past 2-3 decades. However, A.Yura and T.Shimizu reported that although the lifetime prevalence of AEDS in 11 year-old children increased from 15.0% in 1985 to 24.1% in 1993, it levelled off thereafter at 23.2%.

Data from the Odense Adolescence Cohort Study on atopic diseases and dermatitis (Denmark, 2001) showed a lifetime prevalence of AEDS in 11 year-old children increased from 15.0% in 1985 to 24.1% in 1993, it levelled off thereafter at 23.2%.

A close association was found between AEDS and inhalant allergy, asthma and allergic rhinitis. Children with AD usually have a family history of atopic diseases, and 60-70% will develop allergic rhinitis or asthma. The changes in prevalence over the seven years from 1995 to 2002 were shown in a study from U.K. The one-year prevalence of AEDS fell from 16.2% to 11.4% but the lifetime prevalence increased from 21.1% to 24.3%, which could be interpreted as an increase in milder forms of eczema.

Is the hygiene hypothesis correct?

Prof Thomas Diepgen then turned to the risk factors for AEDS. In particular, he addressed the question of which environmental factors might be responsible for the appearance of an atopic phenotype in susceptible individuals. He reminded participants of the inverse relationship between atopic dermatitis and number of siblings, early day care, pet keeping, and farm residence, which is confirmed by numerous of studies. Alm et al, studying 5-13 year-old children from anthroposophic schools (associated with the work of Rudolf Steiner and homeopathy), had found a lower prevalence of atopy in comparison with children of the same age at two neighbouring schools. The anthroposophic lifestyle is characterised by restrictive use of antibiotics, few vaccinations, and widespread use of live lactobacilli in the diet that may affect intestinal microflora.

The so-called “hygiene hypothesis” is reinforced with data from a comparative study from Sweden and Estonia, which goes further in reporting on the differences in the composition of the intestinal flora between allergic infants and non-allergic infants. It demonstrates that these differences are already present during the first week of life. Colonisation with bifidobacteria and low counts of Bacteroides and C difficile appear to be associated with protection against allergy.

More children than adults?

Prof Diepgen devoted the third part of his talk to the natural history of AEDS. AD is often thought to be a disease that predominantly affects children. In the Odense cohort study age at onset was under two years in...
45.4% of cases, between 2.5 years in 22.5% and above five years in 31.4%. This was in contrast to previous findings where the onset occurred before the age of 5 years in 85-90% of the children.

Previously, it was believed that the clearance rate was 30-70%. However, recent studies have shown lower clearance rates in adolescents and adults than previously found. Sandstrom and Faergemann studied the prognosis and prognostic factors in adult patients with AD by a long-term follow-up (25–38 years). Most patients (59%) reported persistence of AD and the mean value for clearance rate per person-year was only 18%. The authors also found that those with reported onset of AD in their teens (13–18 years of age) had an increased risk of persistent AD. Among those with persistent AD, the majority of patients reported residual mild or moderate AD while only 10% reported severe AD.

Food and inhalant allergy: Children

The second speaker, Bodo Niggemann addressed the relevance of food allergy and inhalant allergy in children with AEDS.

Children’s reactions to food are often real allergic reactions while reactions in adults are more likely to be food intolerance. He said that the relevance of food allergy in the AEDS was a matter of controversy. The data from the MAS study about the perceptions of mothers on food allergy showed that they often overestimated the significance of food allergy. On the other hand, the recent use of topical immunomodulators could be a reason for the underestimation of the problem. According to MAS study, sensitisation for air allergens such as house dust mites, cat, dog, grasses and birch became significant after the second year of life in contrast to food sensitisation that is predominant in early life. This sensitisation to air allergens coincides with the peak prevalence of AEDS, which takes place at the age of 36 months. The speaker also mentioned the importance of the genetic factors: a double positive family history of atopy increases significantly the risk of atopic eczema in children.

The speaker then turned to inhalant allergens in children with AEDS. Allergy for perennial allergens like mites could account for perennial eczema while allergy to birch pollens could be responsible for seasonal exacerbations. One early study indicated that hyposensitisation with house dust mite could be beneficial for the clinical course of AEDS but patient numbers were too small to permit confident conclusions. Good studies on this issue are still lacking.

The most important nutritional allergens are cow’s milk, hen’s egg, wheat, soy, peanut and fish. The importance of other kinds of food in exacerbation of AEDS is often overestimated. These include colourings, sugar, sweets, preservatives, citrus fruits, carrots and strawberries. Only the irritative effect of fruit acids can be accepted in terms of aggravation of perioral eczema. The clinical reactions of food allergy are not confined to AEDS exacerbation, Prof. Niggemann said. In addition, other skin symptoms may be experienced such as urticaria, oedema of Quinke, pruritus and flush as well as respiratory, gastrointestinal and circulatory symptoms.

Prof. Niggemann then went on to talking about preventive measures. A recent study from the Netherlands had concluded that the “application of HDM-impermeable mattress covers on the beds of child and parents reduced night cough but that it did not reduce other respiratory symptoms, atopic dermatitis and atopic sensitisation in the first two years of life”. There is therefore no proof that this kind of preventive measures can change the natural course of the disease. The ETAC study showed that the early pharmacotherapeutic intervention in a selected AEDS population with high level of house dust mite and grass pollen sensitisation could be prophylactic for future asthma.

Finally, the speaker described the association between AEDS and food allergy: both of which are manifest in early life and show a significant overlap. In a recent study from Germany, 55% of 173 oral provocations were assessed as positive. The positive reaction could be consequently subdivided into 49% early reactions, 26% late phase reactions and 25% combined reactions (exacerbation of eczema and urticaria or gastrointestinal reaction). Another study found positive food challenges in 46% of the children with atopic dermatitis. Isolated, late eczematous reactions were seen in 12% of all positive challenges while 45% of the positive challenges were associated with late eczematous responses, which followed immediate-type reactions. Prof. Niggemann concluded that food allergy matters in the pathogenesis of AEDS.

Food and inhalant allergy: Adults

Carsten Bindslev-Jensen discussed the relevance of food and inhalant allergy in adults with AEDS. He began by addressing the relation between asthma and atopic dermatitis: are they one common disease or two different diseases? He challenged the dogma of atopic dermatitis (AD) as the first step in the atopic march. He pointed to the conclusion of the most recent data of the MAS study, which states that: “rather than early AD being a risk factor for subsequent asthma in a progressive atopic march, it seems more likely that a certain phenotype exists as a coexpression of asthma and AD characterised in early life by AD plus either wheezing or a specific pattern of atopic sensitisation and a more severe course, resulting in significant impairment of lung function”.

These data are corroborated by another longitudinal study that examined 94 children with AD during a period of eight years. Seventy percent of the children with severe AD developed asthma compared with 30% of the patients with mild AD. This compared with approximately 8% in the general population. So the severity of AD was closely related to the subsequent development of asthma. Additional confirmation of the data came from a genetic study of SPINK5 420Lys genotype, which was more prevalent in children with a combination of asthma and atopic dermatitis compared with controls. However, no association between SPINK5 420Lys genotypes and total serum IgE levels, skin prick test reactivity or atopic dermatitis was observed.

Prof. Bindslev-Jensen then focused on the relevance of food allergy for atopic dermatitis in adults. A Finnish study based on the combination of a questionnaire, a skin prick test and specific IgE measurement demonstrated that students with current or past AD and multiple atopic diseases were the most likely to report food allergy. However, food challenges were not performed in this study.

Prof. Bindslev-Jensen then talked about the relevance of inhalant allergy on AEDS. In the Odense Adolescence
Skin symptoms were preceded by an early bronchial reaction. Prof. Bindslev-Jensen posed the question: "Could this be another link to the hypothesis of asthma and AD as a one disease?" However, he added that the reactions were mild and could also be attributed to the natural fluctuation of the disease.

A German group (Aptery Patch Test Study Group) was able to find a significant concordance of APT results with history, skin prick, and RAST for D. pteronyssinus, cat dander and grass pollen. However, no challenges were performed. Another German study performed oral challenges with birch pollen-related food in AEDS patients who had a proven hypersensitivity to birch pollen but who did not have any history of immediate responses to food. Five patients reacted with an improvement of atopic dermatitis and 17 with deterioration. Again, spontaneous fluctuation in the disease could not be excluded.

The speaker concluded that the question about the relevance of food and inhalant allergy in AEDS would not be answered until well-designed studies are carried out.

Immunosuppressive drugs

Marjolein de Bruin-Weller said that treating atopic dermatitis with local formulations was not sufficiently powerful to control the disease in many cases. She considered that oral immunosuppressive drugs have a place in the treatment of this pathology. Cyclosporin, which has potent immunosuppressive properties, interferes with nuclear factors of activated T-cells (NF-AT) by preventing cytokine gene transcription, particularly interleukin-2. This induces maturation and proliferation of helper T-cells. Data from a prospective, open, multicentre study (N=65) on severe adult atopic dermatitis provided compelling evidence that cyclosporin produced rapid and highly significant improvements in all indices of disease activity. The most important adverse events were nephrotoxicity and arterial hypertension. Other common side effects include mucous-cutaneous, neurological and gastro-intestinal symptoms. However, the incidence is rather low in patients with cutaneous diseases.

Another recent study performed on 40 children with severe AEDS also showed a good clinical response to a cyclosporin dose of 5 mg/kg per day. Overall tolerability was assessed as "good" or "very good" by 80% of the parents and investigators. A temporary rise in the creatinine value of more than 30% was measured in only four patients.

The speaker also presented her own data, which has been submitted for publication. It shows an excellent response (about 72%) to cyclosporin plus a three-month remission after discontinuation of the treatment. However, a relapse occurred in 41% of cases. Sometimes, the patients reacted to cyclosporin treatment with a significant elevation in IgE. The propensity for relapse could be related to this phenomenon. It could also be explained by the suppressive effect of immunomodulators on the Th1, which may skew the immune system towards a Th2 type response.

Tacrolimus represents another possibility for oral immunosuppressive therapy. However, it is neurotoxic and leads to increases in blood sugar levels. In addition, studies are lacking. Azathioprine also frequently causes side effects such as gastrointestinal disturbances (nausea and vomiting), leukopenia and deranged liver enzymes. However, it is a common choice for treatment of the recalcitrant AEDS. A double-blind, randomised, placebo-controlled, crossover trial has confirmed its efficacy.

Promising results were demonstrated in a pilot study on 20 patients treated with another immunosuppressive drug, namely, mycophenolate mofetil, which blocks the proliferative responses of T and B lymphocytes. The treatment was well tolerated and the median scores for disease severity improved by 68%. Prof. Bruin-Weller said that mycophenolate mofetil could become an alternative to cyclosporin for patients with high levels of IgE as a result of its properties in significantly reducing the production of IgE from B-cells.

In conclusion, she said that more DBPC studies are necessary to compare different immunosuppressive drugs and to assess different patient populations.

Maria Staevska
SYMPOSIUM
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- Role of superantigens in epithelial cell and smooth muscle cell apoptosis in asthma and atopic dermatitis. C. Akdis, Davos

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- Animal models with superantigens: What can we learn? P. Hellings, Leuven
- Intracellular Staph. Aureus. C. von Eiff, Münster

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- Staph. aureus superantigens in the lower airways. P. Howarth, Southampton
- Impact of Staph. aureus in early childhood. A. Custovic, Manchester
- Staph. aureus and aspirin sensitivity: Is there a link? M. Kowalski, Lodz, C. Perez-Novo, Ghent

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- Organisation
- Resources
- Journals
- Members