



**American Contact Dermatitis Society
20th Anniversary Meeting
The Palace Hotel, San Francisco, CA
March 5, 2009**

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American Contact Dermatitis Society

20th Anniversary Meeting

Thursday, March 5, 2009

The Palace Hotel ☞ 2 New Montgomery Street
San Francisco, CA

Schedule of Events

6:45 **Registration Open**

7:30 **Breakfast Symposium (tickets required)** **Ralston Ballroom**

7:45 **Welcome to Breakfast Symposium**
Support provided by Galderma Laboratories
David Cohen, MD (USA)

Pearls from Dr. Alexander Fisher
Fran Storrs, MD (USA)

General Session / Fisher Presentations **Gold Ballroom**

8:30 **Welcome**
Erin Warshaw, MD, ACDS President

Annual Meeting Chair
Glen Crawford, MD

8:35 **Allergic Contact Dermatitis to Vitamin E: The experience at Mayo Clinic Arizona, 1987-2007**
Alison K. Adams, MD (USA)

8:44 **A Case Series of Metal Prostheses Allergy**
Jennifer Beecker (Canada)

8:53 **Relevance of Doubtful Late Patch Test Readings**
Sean Carlson, D.O. (USA)

9:02 **Allergic Contact Dermatitis from Dimethylfumarate after Contact with Chinese Sofa**
Joseph Doumit, MD, B. Eng (Canada)

9:11 **Contact Allergy to Acrylates: 10 Years of Experience**
Aaron Mark Drucker, BA (Canada)

9:20 **Contact Dermatitis by Proxy: a criminal cause of MCI/MI allergy**
Tiffany Kwok, BHSc (Canada)

9:29 **Abstracts Presented at Annual Meetings of the American Contact Dermatitis Society that Lead to a Publication**
Lana H. McKinley, DO (USA)

9:38 **Results of Patch Testing to Rubber Allergens and Latex: An Eight Year Retrospective Review from Mayo Clinic**
Margo Jane Reeder, BS (USA)

9:47 **True photoallergy to sunscreens is rare, despite popular belief**
Tatyana Shaw (USA)

9:56 **Patch Test Results for the Plastics and Glues Series at Mayo Clinic, 2000-2007**
Eugenia Shmidt, Medical Student (USA)

Break

10:05 **Posters and Exhibits** **Regency Foyer**
Break supported by Allerderm

General Session / Occupational Dermatology

10:30 **Analysis of Occupationally-Related Positive Patch Test Results in the 2001-02 North American Contact Dermatitis Group Canadian Data**
Victoria H. Arrandale, M.Sc. (Fellow) (Canada)

10:39 **Return to Work Experience in the Six Months Post Diagnosis of Work-Related Contact Dermatitis**
Victoria Arrandale, MD (Canada)

10:48 **The Complex Nature of Occupational Contact Dermatitis**
Rosemary Nixon, MD (Australia)

10:57 **Occupational Dermatoses in Machinists, Mechanics, and Metal Workers Evaluated for Suspected Contact Dermatitis**
Tina Suneja, MD (USA)

General Session

11:06 **Association between positive patch tests to epoxy resin and fragrance mix ingredients**
Klaus Ejner Andersen, MD, DMSc (Denmark)

11:15 **Rainbow Shading of Screening Allergen Series: A Visual Aid to Teach About Contact Allergens and Potentially Temper Allergen Selection**
Mari Paz Castanedo-Tardan, M.D. (USA)

11:24 **Allergic contact dermatitis (ACD) to methylchloroisothiazolinone (MCI) and methylisothiazolinone (MI) in a flushable moist wipe**
Daniel J. Hogan, MD (USA)

11:33 **Fragrance Paradox**
Joseph Francis Kerbleski, MD (USA)

11:42 **Results of the 2008 ACDS Membership Practices Survey**
Matthew James Zirwas, MD (USA)

11:51 **New Functionality of the Contact Allergen Replacement Database (CARD)**
James A. Yiannias, MD (USA)

12:00 **Roundtable Lunch (tickets required)** **Ralston Ballroom**
Roundtable Lunch supported by Dormer/Chemotechnique

General Session

Gold Ballroom

13:00 **Allergen of the Year**
David Adams, MD (USA)

13:05 **Fisher Lecture**
History of Patch Testing
Jean-Marie Lachapelle, MD (Belgium)

14:05 **ACDS Award Announcements**
Maibach Travel
Clinical Research Award
Mentoring Award
Fisher Resident Awards

General Session

14:20 **Evaluation of a self-test device in allergic contact dermatitis**
Peter Elsner, MD (Germany)

14:29 **Cigarette Allergy**
Alison Ehrlich, M.D., M.H.S. (USA)

14:38 **Vulvar allergic contact dermatitis to clotrimazole**
Samantha Pullen, MD (USA)

14:47 **Skin Protection Products against Lipophilic Irritants - Do They Really Work?**
Sibylle Schliemann, MD (Germany)

Break

15:00 **Break / Posters and Exhibits** **Regency Foyer**
Break supported by Smart Practice Canada

General Session **Gold Ballroom**

15:30 **Allergic Contact Dermatitis from Carmine**
Daniel W. Shaw, MD (USA)

15:39 **Positive Patch Test Reactions to Retapamulin Ointment in Two Patients**
Erin Warshaw, MD (USA)

15:48 **Dermographism Presenting as Contact Dermatitis to Spectacle Frames**
Kalman L. Watsky, MD (USA)

15:57 **History of the ACDS**
James S. Taylor, MD (USA)

16:17 **History of the Journal, *Dermatitis***
Ponciano Cruz, MD (USA) and Editor-in-Chief, *Dermatitis*

16:27 **Future of Patch Testing**
Howard I. Maibach, MD (USA)

Business Meeting

16:45 **Business Meeting**
Erin Warshaw, MD

Reception **French Parlor**

17:00 **Reception**
Support provided by Ferndale Laboratories

Poster Presenters

Posters are in the Regency Foyer Exhibit Hall.

Ivan Chromej, MD
Katrina A Gipson BS
Jeffrey Scott Henning, DO, MAJ USA
Lilla Landeck MD
Meltem Onder MD

Maria Antonieta Scherrer MS MD
Daniel W. Shaw M.D.
Inu Tiwari Medical Student
Slavo Urbancek MD, PhD
Matthew James Zirwas MD

Exhibits

Exhibits and Posters are in the Regency Foyer

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Faculty Disclosures

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No issues to resolve or commercial interests resolved.

Alison K Adams MD; Klaus Ejner Andersen Professor MD, DMsc; Victoria H Arrandale M.Sc. (Fellow); Jennifer Beecker ; Sean Carlson D.O.; Mari Paz Castanedo-Tardan M.D.; Ivan Chromej MD; Glen H. Crawford MD; Joseph Doumit MD MD, B. Eng; Aaron Mark Drucker BA; Alison Ehrlich M.D., M.H.S.; Peter Elsner MD; Cynthia Froehlich, MA; Katrina A Gipson BS; Jeffrey Scott Henning DO, MAJ USA; Daniel J Hogan MD; Joseph Francis Kerbleski M.D.; Tiffany Kwok BHSc; Jean-Marie Lachapelle Professor ; Lilla Landeck MD; Howard Maibach MD; Lana H McKinley DO; Rosemary Nixon MD; Meltem Onder MD; Samantha Pullen, MD ; Margo Jane Reeder BS; Maria Antonietta Scherrer MS MD; Sibylle Schliemann MD; Daniel W. Shaw M.D.; Tatyana Shaw M.D.; Eugenia Shmidt ; Frances Storrs MD; Tina Suneja MD ; James Scott Taylor MD; Slavo Urbancek MD, PhD; Erin Warshaw MD; Kalman L. Watsky MD; James A Yiannias MD; Matthew James Zirwas MD.

Issues not yet resolved at time of printing.

Ponciano Cruz, MD; Inu Tiwari, Medical Student.

Any real or apparent conflicts of interest will be resolved by the committee prior to the presentation.

ABSTRACTS

Presentations listed in order of presentation

General Session / Fisher Presentations

ALLERGIC CONTACT DERMATITIS TO VITAMIN E: THE EXPERIENCE AT MAYO CLINIC ARIZONA, 1987-2007

Alison Adams, MD, Dermatology Resident, Mayo Clinic Arizona, Scottsdale, AZ

Suzanne M. Connolly, MD, Associate Professor of Dermatology, Mayo Clinic Arizona, Scottsdale, AZ

Vitamin E, also known as alpha-tocopherol, has become widely known for its antioxidant effects. It is has been ingested as well applied topically for purported anti-aging effects as well as cosmetic enhancement.

Due to the heightened interest in vitamin E, we questioned whether there might be an increased incidence of allergic contact dermatitis to it in more recent years. With the approval of the Mayo Clinic Institutional Review Board, patch test data from patients seen at Mayo Clinic Arizona from June 1987 through December 31, 2007 was reviewed. A total of 2950 patients were patch tested during this time period and 18 patients (0.61%) had positive reactions. Between June 1987 and December 31, 1996, a total of 6 of 1020 patients (0.59%) and between January 1, 1997 and December 31, 2007 a total of 12 of 1930 patients (0.62%) had positive patch tests

to alpha-tocopherol. Limitations of the study included its retrospective nature and that different formulations of alpha-tocopherol were used for patch testing during the study period.

According to the Environmental Working Group's Skin Deep cosmetic safety database, there are over 12,000 products currently on the market that contain vitamin E. Despite this fact, vitamin E appears to be a relatively rare contact allergen in our experience.

A CASE SERIES OF METAL PROSTHESES ALLERGY

Jennifer Beecker; Melanie Pratt
The University of Ottawa
Ottawa, Ontario, Canada

Three cases of systemic contact allergic dermatitis from metal prostheses are presented. A nickel allergic patient received a femoral artery nitinol stent. A recalcitrant systemic contact dermatitis developed, requiring explantation of the device. This is the first reported case of a systemic nickel contact dermatitis secondary to peripheral artery stenting.

A second patient presented after a hip prostheses replacement. The hip was replaced with a cobalt-chromium-molybdenum alloy prosthesis. A localized, then systemic, contact dermatitis ensued. It was resistant to treatment, requiring oral steroids for control. The patient was strongly patch test positive to cobalt.

A third patient had documented severe nickel and cobalt allergy. She received a knee replacement using a cobalt alloy as there were a lack of other robust metal options. She developed persistent systemic contact dermatitis.

Contact allergic dermatitis from metal in joint prostheses is rare although both joint prostheses and metal allergy are common in the general population. Even patients with known metal allergy often do not react to their metal prosthesis. There is controversy around whether patch testing is required in patients who are about to receive metal prostheses. This series suggests that a history of metal allergy should be elicited before a prostheses is placed. If there is a history of severe allergy and the patch testing is positive for metals, there may be a higher probability of systemic contact dermatitis in these patients.

RELEVANCE OF DOUBTFUL LATE PATCH TEST READINGS

Sean Carlson D.O., University Hospitals Richmond Medical Center, Cleveland, OH
Katrina Gipson B.S., Case Western Reserve University School of Medicine, Cleveland, OH
Susan T. Nedorost M.D., University Hospitals Case Medical Center, Cleveland, OH

Background: Doubtful late patch test readings are often not considered clinically relevant. As a result, many allergens with doubtful late patch test readings may not be disclosed to the patient, and relevant allergens may in turn not be avoided.

Objective: We hypothesize that doubtful late reactions at a day 7 reading are often relevant. We compared the patients' assessments of relevance to the strength of reaction at the time of final reading.

Methods: 407 subjects who underwent patch testing from January 2005 to February 2008 were mailed an IRB-approved survey asking if they did or did not need to avoid each of their positive patch test allergens in order to remain free of dermatitis. Clinical charts of respondents who indicated that their dermatitis was at least 80% improved were reviewed for strength of patch test response at day 7 for each positive patch test.

Results: 92 subjects (reporting on 291 positive patch tests) returned surveys reporting greater than 80% improvement in their rash. 79% with doubtful late reads, 85% of 1+ late reads, 84% of 2+ late reads, and 100% of 3+ late reads were reported as relevant.

Conclusion:

Based on the patients' assessment of relevance, doubtful late reactions were considered relevant almost as frequently as 1+ late readings.

ALLERGIC CONTACT DERMATITIS FROM DIMETHYLFUMARATE AFTER CONTACT WITH CHINESE SOFA

Joseph Doumit, Melanie Pratt, Division of Dermatology, University of Ottawa, Ottawa, Canada

Dimethylfumarate has been successfully used in the treatment of psoriasis. Despite its clinical use, cutaneous contact to this molecule may cause contact dermatitis. We report a case in which skin exposure to a sofa containing dimethylfumarate made by a Chinese furniture manufacturer resulted in a severe pruritic papulovesicular eczematous dermatitis to the sites of contact to the sofa. The patient was patch tested with serial dilutions of dimethylfumarate which elicited positive reactions to the allergen.

CONTACT ALLERGY TO ACRYLATES: 10 YEARS OF EXPERIENCE

Aaron M. Drucker, Queen's University, Kingston, Ontario, Canada and Dr. Melanie D. Pratt, University of Ottawa, Ottawa, Ontario, Canada

Background: Acrylates are present in a wide variety of products and cause occupational and non-occupational allergic contact dermatitides. Artificial nails, dental prostheses and UV-curable inks are potential routes of exposure.

Objective: To assess the significance of acrylate allergy in an Ottawa outpatient contact dermatitis clinic. **Methods:** Charts of patients visiting the Ottawa outpatient contact dermatitis clinic from January 1998 ? February 2008 were reviewed.

Results: 47 patients were found to have contact allergy to acrylates. The most common positive allergens were hydroxyethyl methacrylate (HEMA) (30), ethyl acrylate (EA) (28), methylmethacrylate (MMA) (25) and ethyleneglycol dimethacrylate (20). Thirty-two of the 44 (73%) positive patch tests would have been discovered with the use of the 2 compounds (MMA, EA) in the North American Contact Dermatitis Standard Screening Series, while 12 were found through expanded patch testing. If HEMA were to be added to the series, it would have found 8 additional cases. Artificial nails (14), dental materials (9) and adhesives (5) were the most relevant exposures. Occupational relevance was found in 24 cases, including: dental workers (5), assemblers (5), aestheticians (4) and auto mechanics (3).

Conclusions: Acrylates are an important source of contact allergy. The standard screening series identifies most cases of acrylate allergy, but may miss a substantial number. Clinicians should be aware of acrylates potential sources of allergy, even if initial screening is negative.

CONTACT DERMATITIS BY PROXY: A CRIMINAL CAUSE OF MCI/MI ALLERGY

Tiffany Kwok^{1,2}, Sandy Skotnicki-Grant^{2,3}

¹University of Western Ontario, London, ON, Canada ²James R Nethercott Occupational Health Clinic, St. Michael's Hospital, Toronto, ON, Canada ³University of Toronto, ON, Canada

Methylchloroisothiazolinone/methylisothiazolinone (MCI/MI) is a preservative often encountered in industrial detergents, fuels, glues, and paints, and less commonly in footwear. MCI/MI is a potent dermal sensitizer, commonly causing allergic contact dermatitis.

We present the case of a 35-year-old female laboratory worker in a latex paint factory referred for a severe 4-year history of pruritic, erythematous, blistering of the soles of her feet with secondary eruptions on the neck and arms. Possible contact dermatitis to her workboots was postulated. Patch testing to the North American Standard tray, Chemotechnique shoe tray and shoe sample revealed a 1+ reaction to MCI/MI and 2+ reaction to her shoes. Her foot dermatitis persisted despite custom workboots without MCI/MI. She later presented with a severe eruption on the backs of her thighs and milder changes on the bridge of the nose. Further patch testing to the rubber tray, plastic and glues tray, and samples of her lab goggles and new shoes to rule out other allergens were negative. Through surveillance tapes the company discovered that a co-worker had been spraying her workplace and shoes with MCI/MI. This case is now being handled in criminal court. The eruption resolved and she has returned to her former job with no modifications. This case highlights a fascinating incident of maliciously-caused contact sensitization.

ABSTRACTS PRESENTED AT ANNUAL MEETING OF THE AMERICAN CONTACT DERMATITIS SOCIETY THAT LEAD TO A PUBLICATION.

Daniel J. Hogan MD, Bay Pines VA Healthcare System; NOVA Southeastern University College of Osteopathic Medicine

Lana H. McKinley DO, NOVA Southeastern University College of Osteopathic Medicine

Objective: The aim of this study was to determine the percentage of abstracts presented at the ACDS annual meeting that led to a publication, whether the country of origin was associated with likelihood of publication, and to identify the journals in which they were published.

Methods: Abstracts presented at the 2000, 2003, and 2006 ACDS meetings were identified. Using keywords and author names, PubMed was searched for published papers corresponding to the work presented at these meetings. A match was confirmed by comparing the context of the abstracts with the fully published articles.

Results: Of the 117 presented abstracts, 46% had been published by October 2008. Mean time for publication was 1.5 years, excluding 5% published prior to the annual meeting. The percent of abstracts published declined over the 6 year period by approximately 11% with a 23% decrease in mean lag time to publication. Of those presentations published, 38% were published Dermatitis (formerly American Journal of Contact Dermatitis), 18% in Contact Dermatitis, 12% in the Journal of American Academy of Dermatology, and 32% in other journals.

Conclusions: Almost one half of ACDS meeting presentations result in publication of an original article. Most were published within 1-2 years. A general trend in decline of published abstracts was noted. A majority of abstracts were published in Dermatitis.

RESULTS OF PATCH TESTING TO RUBBER ALLERGENS AND LATEX: AN EIGHT YEAR RETROSPECTIVE REVIEW FROM MAYO CLINIC

Reeder MJ, BS; Davis MDP, MD; Farmer S, BA
Department of Dermatology
Mayo Clinic Rochester, Minnesota

Background: Allergic contact dermatitis (ACD) to rubber chemicals including rubber latex is increasingly recognized. A supplemental series of rubber allergens can augment the ability to diagnose ACD to rubber.

Objective: To review our experience patch testing to rubber allergens including latex.

Patients and methods: After IRB approval, patients patch tested to rubber allergens including latex were identified from the Mayo Clinic Patch Testing Database from 2000-2007.

Results: Of the 782 patients, mean age was 48.6 years (range 3-89), 504 (64.5%) were female, and 126 (16.1%) were health care workers. Positive reaction rate to at least one rubber allergen was 247/782 (31.6%). In the rubber series, most frequent positive reactions were to 4,4-Dithiodimorpholine 1% (28, 9.8% positive), Diphenylguanidine 1% (57, 7.5%), and Tetramethylthiuram monosulfide 1% (42, 5.4%). Most common positive reactions to rubber allergens in the standard series were to Thiuram mix (56, 7.6%), Carba mix (55, 7.4%), and Mercaptobenzothiazole 1% (15, 2.0%). Patch testing to latex revealed 5/163 (3.07%) positive reactions.

Comparing diagnostic yield of standard to rubber series, 121/241 (50.2%) of the positive reactions were negative to standard series rubber allergens but were positive to a rubber series allergen.

Conclusions: Patch testing with a special rubber series augments the ability to diagnose ACD to rubber by approximately 100%. Latex itself is a frequent cause of ACD.

TRUE PHOTOALLERGY TO SUNSCREENS IS RARE, DESPITE POPULAR BELIEF

Tatyana Shaw, MD., David Rainey, Holly Oostman, Brenda Simpson, Frances Storrs, MD.
Oregon Health & Science University, Portland, Oregon, USA

In this IRB-approved study we investigated possible photoallergic reactions in patients who identified themselves as "being allergic" to sunscreens. Our patients filled out questionnaires about the timing of their reactions, their relationship to sun exposure, and to the types of sunscreens they tried. Next, patients consented to participate in photopatch testing to a number of active sunscreen ingredients, as well as to the new sunscreens, such as Anthelios SX (sunscreen with Mexoryl), Tinisorb S and Tinisorb M. Patch testing included our standard patch testing allergens.

Twenty six patients self-reported "sunscreen allergy." As photopatch testing is difficult for the patients, only eleven patients agreed to proceed with the testing. Eight of these patients had negative patch testing results. One patient reacted to benzophenone-2. Another patient had a previous history of a reaction to titanium oxide and titanium oxalate but no new positives during the study. Yet another patient had a relevant positive photopatch test to oxybenzone, and octyl dimethyl para-aminobenzoic acid (PABA). None of the eleven patients reacted to the Tinisorbs or Anthelios SX. There were some positive reactions to the standard allergens, such as nickel, but none were relevant to sunscreens.

Although small, this study parallels prior studies in conclusions that the true type IV hypersensitivity (allergic contact dermatitis and photoallergy) to sunscreens is more infrequent than patients tend to believe.

PATCH TEST RESULTS FOR THE PLASTICS AND GLUES SERIES AT MAYO CLINIC, 2000-2007

Eugenia Shmidt, Mark D. Davis, M.D. Mayo Clinic Rochester, MN

Objective: to report results of patch testing with a plastics and glues series at Mayo Clinic.

Methods: after obtaining IRB approval, the results of patch testing with the plastics and glues series at Mayo Clinic from the past 8 years were retrospectively reviewed and compared with previous literature reports.

Results: 444 Mayo Clinic patients in Rochester MN, Jacksonville FL, Scottsdale AZ were patch tested with a plastics and glues series of allergens. 97 (22%) had irritant reactions; 201 (45%) had at least one allergic patch test reaction. The five allergens associated with the highest number of allergic patch test reactions were bis (2-methylaminoethyl) ether 1%; benzoyl peroxide 1%; epoxy resin, bisphenol F 0.25%; 2-hydroxyethyl methacrylate 2%; 2-hydroxyethyl acrylate 0.1%. Patch testing to our plastics and glues series permitted identification of 162 additional patients that would not have otherwise been identified by testing to the standard series alone. Patch testing to the standard series alone only identified 39 patients with a plastic and glue allergy, and the plastics and glues series identified 193 patients.

Conclusions: A specialized plastics and glues series helped identify patients allergic to plastics and glues that would not be identified on patch testing to the standard series alone. Analysis of our patch test reaction rates enables us to compare and recommend contact allergens for patch testing that are common and potentially clinically relevant.

General Session / Occupational Dermatology

ANALYSIS OF OCCUPATIONALLY-RELATED POSITIVE PATCH TEST RESULTS IN THE 2001-02 NORTH AMERICAN CONTACT DERMATITIS GROUP CANADIAN DATA

V.H.Arrandale¹, G.Liss¹, S.M.Tarlo^{1,2}, M.Manno³, M.Pratt⁴, D.Sasseville⁵, I.Kudla³ and D.L.Holness^{1,3}
1University of Toronto, Canada; 2Toronto Western Hospital, Toronto, Canada; 3St Michael's Hospital, Toronto, Canada; 4University of Ottawa, Ottawa, Canada and 5McGill University, Montreal, Canada.

Introduction: This study reports on the characteristics of the occupationally-related positive patch test (PPT) results in the 2001-02 North American Contact Dermatitis Group (NACDG) Data.

Methods: PPTs were identified from Canadian NACDG data (2001-02). The primary diagnosis, causative agent and industry of employment were included in the record. For allergens with ≥ 1 occupationally-related PPT result the literature was reviewed to determine whether they were also associated with occupational asthma (OA).

Results: Patients (n=1211) were 70% female, predominantly Caucasian (88%) and 44 years of age (sd 15.8) on average. In total, 211 (17%) patients from 69 industries had an overall occupationally-related diagnosis; 148 (70%) had a primary diagnosis of allergic contact dermatitis (ACD) and 45 (21%) irritant contact dermatitis (ICD). Of these, only 92 (44%) patients from 35 industries had ≥ 1 occupationally-related PPT result to standard tray allergens; 88 (96%) had a primary diagnosis of ACD and 2 (2%) of ICD. Of the 10 most common occupationally-related allergens, 7 were also identified as causing OA.

Conclusions: In this population, the majority of occupationally-related PPTs were diagnosed as ACD. Results suggest that there were occupationally-related non-standard tray PPTs that were not captured in this data. Healthcare providers should also be aware that several common allergens can also cause OA.

RETURN TO WORK EXPERIENCE IN THE SIX MONTHS POST DIAGNOSIS OF WORK-RELATED CONTACT DERMATITIS

D Linn Holness, V.H. Arrandale, University of Toronto and St Michael's Hospital, Toronto, Canada.

Work-related contact dermatitis (WRCD) may result in poor work outcomes, however there is limited information on the return to work (RTW) process. This study examined the RTW experience of workers with WRCD over a six month period following diagnosis.

The study was approved by the hospital Research Ethics Board. 100 workers with hand dermatitis were enrolled and followed for six months post diagnosis. Information concerning work status, RTW process and health care utilization was collected at the time of diagnosis and at 3 and 6 months post diagnosis.

78 workers were diagnosed with WRCD and 60 completed all follow-up assessments. Six months post assessment, 38% were not working, almost all because of their skin problem. Of those working, 32% had changed jobs, almost all because of their skin problem. The minority reported receiving advice related to workplace modifications. At six months, 62% had seen their family physician in follow-up and 39% a dermatologist. In the minority of cases work modifications were discussed by the health care provider. In this group of workers with WRCD there was significant work disruption in the six months following diagnosis. Potential gaps in the provision and follow-up of workplace modifications were identified. In addition, there may be opportunities for improved post diagnostic medical care.

Funded by Ontario Workplace Safety and Insurance Board

THE COMPLEX NATURE OF OCCUPATIONAL CONTACT DERMATITIS

Dr. Rosemary L Nixon, Occupational Dermatology Research and Education Centre, Skin and Cancer Foundation Victoria, Melbourne, Australia

Many factors contribute to occupational contact dermatitis. It is important to recognise all the contributing factors in order to maximise the clinical outcomes for workers.

Data from our occupational dermatology clinic from 1993 to 2004 was collated and reviewed. 1743 people were referred to the clinic for assessment. 1009 (57.9%) were male and 1443 (82.8%) were diagnosed with occupational dermatitis substantially or partially related to work. An attempt was made in each case to list all the factors contributing to the workers' skin condition.

In 48.5% of cases, there was more than one factor assessed as contributing to the skin condition. In 1.9% of cases there were four contributing factors. For example in a nurse, the diagnoses made were allergic contact dermatitis to coconut diethanolamide in a skin cleanser, latex allergy, irritant contact dermatitis on a background of atopic eczema.

It was noted that with experience, there was increased recognition of the role of irritant contact dermatitis, particularly in hairdressers. Irritant contact dermatitis is of course a clinical diagnosis, which is made after the exclusion of allergic contact dermatitis with patch testing.

Atopics were 1.9 (1.7-2.1) times more likely to have more than one factor contribute to their condition. They were significantly more likely to suffer from both irritant contact dermatitis and contact urticaria, the latter, particularly caused by latex. It is important to suspect multiple factors in occupational dermatitis in atopics, and most workers attending the clinic are screened with a RAST (radioallergosorbent test) for latex allergy.

OCCUPATIONAL DERMATOSES IN MACHINISTS, MECHANICS, AND METAL WORKERS EVALUATED FOR SUSPECTED CONTACT DERMATITIS

Tina Suneja, M.D. and Donald V. Belsito, M.D.

Introduction: Skin disease is common among machinists, mechanics, and metal workers (MMMWs) due to their exposure to metalworking fluids, oil and cooling fluids, and various detergents, solvents and greases. There is little published literature from the US regarding occupational dermatoses in these workers.

Objectives:

- 1) to evaluate the etiology of skin disease in MMMWs evaluated for suspected allergic contact dermatitis (ACD);
- 2) to identify the most common allergens among those patients found to have ACD;
- 3) to assess those occupational factors contributing to skin disease in these workers; and
- 4) to contrast the findings above for MMMWs with those of non-MMMWs, especially among that subset of patients with occupationally related skin disorders.

Methods: This will be a retrospective study of patients patch tested by Donald V. Belsito, MD from 1 July, 1994 onward. Between 1 July 1994 and 30 June 2007, a total of 1534 patients underwent patch testing by Dr. Belsito. Of these 141 were MMMWs (as defined below) and 1393 were non_MMMWs. Prior to testing, patients completed a standardized NACDG questionnaire, which includes demographic, medical and occupational information. As part of the occupational history, all patients are assigned a 3-digit standardized industrial and standardized occupational code, which specifically identifies an occupation within a given industry. For the purpose of this study, we will define MMMWs as those individuals whose primary occupation would involve exposure to metals, metalworking fluids, greases, oil and cooling fluids, and/or hydrocarbons. We eliminated machinists who were not likely to have exposure to these agents. Patients were patch tested in a standardized manner using Finn Chambers (Epitest Ltd, Öy, Tuusula, Finland) on Scanpor tape (Norgeplaster Aksjeselskap, Vennesia, Norway). The patches were applied to the patient's back as previously described¹. Test allergens were purchased from Chemotechnique Diagnostics AB, Malmö, Sweden. Allergens were applied on Mondays and patients were examined at both 48 and 96 hours by the mentor on this project (Donald V. Belsito, MD). Reactions were graded from 1 to 6 based on reaction morphology as previously defined². Reactions of 1, 2, or 3 were considered allergic, while reactions scored 4 were doubtful. Dermatitis site, dermatitis type, exposure source, and relevance were also noted. Relevance of a positive patch test reaction was graded as previously described³. In this study, relevance scores of 1 (definite), 2 (probable), and 3 (possible) were considered relevant.

HIPAA-compliant data on all patients patch tested by Dr. Belsito are entered in an Access (Microsoft, USA) database. These data will be retrieved and analyzed using Access and Excel software programs (Microsoft, USA) to accomplish the objectives of this study. A χ^2 test will be performed to determine statistical significance of difference between two populations. P-values less than 0.05 will be considered significant. Prevalence ratios will be calculated to express the risk of allergen sensitization between MMMWs and non-MMMWs using OpenEpi® software (www.openepi.com, Atlanta, Georgia).

Significance: Although the number of patients available for analysis is small, this study will delve deeply into those factors contributing to skin disease in MMMWs in the metropolitan Kansas City, MO area. The population of MMMWs in this Midwest city range from workers at large scale, automated aviation and automobile plants to small scale, less automated, machine shops. We believe that the data generated will reflect those of most MMMWs in the US, and such data have not been previously published.

References

1. Storrs FJ Rosenthal LE, Adams RM et al. Prevalence and relevance of allergic reactions in patients patch tested in North America- 1984 to 1985. J Am Acad Dermatol. 1989 Jun;20(6):1038-45.

2. Shaffer MP and Belsito DV. Allergic contact dermatitis from glutaraldehyde in health-care workers. Contact Dermatitis. 2000, Sep;43(3):150-6.
3. Suneja T and Belsito DV. Thimerosal in the detection of clinically relevant allergic contact reactions. J Am Acad Derm. 2001. Jul;45(1): 23-27.

General Session

ASSOCIATION BETWEEN POSITIVE PATCH TESTS TO EPOXY RESIN AND FRAGRANCE MIX INGREDIENTS

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Epoxy resin and fragrance mix are both included in the European Baseline Series. A significant association between positive reactions to epoxy resin and fragrance mix has been reported from Sweden. In order to investigate and possibly reproduce this association we analysed patch test data from Department of Dermatology, Odense University Hospital, Denmark. A total of 6115 consecutive eczema patients tested with the use of TRUE® test panel 1 and 2 from 1995 to 2007 were included. Whenever a fragrance allergy was suspected supplementary tests with fragrance mix ingredients were performed. 145 (2.4%) were positive to epoxy resin and 282 (4.6%) were positive to fragrance mix. 19 were positive to both giving an Odds Ratio of 3.3, which is significant (95% CI 2.0-5.4). Analysis of association to individual fragrance mix ingredients showed a significant association to a-amyl cinnamaldehyde and isoeugenol.

Conclusions: The significant association between positive reactions to epoxy resin and fragrance mix I was reproduced. However, the clinical implications are not clarified, and even though the association may be coincidental, the fact that it can be reproduced with a different patch test system and in a different population speaks against a random result. Further studies may help to interpret the association.

RAINBOW SHADING OF SCREENING ALLERGEN SERIES: A VISUAL AID TO TEACH ABOUT CONTACT ALLERGENS AND POTENTIALLY TEMPER ALLERGEN SELECTION

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Teaching students and residents about contact allergens and selecting allergens to test are two stimulating challenges of an academic contact dermatitis clinic. There is no perfect or universal screening test series for a general population, not to mention one for each type of population (i.e. children, eyelid dermatitis, etc.). The number of allergens selected for testing can be and often is individualized. We present for discussion a concept of using the colors of the rainbow to color-code a given screening allergen series according to the frequency of positive reactions to the allergens based on most recent published data. For example, the screening series data sheet is shaded with 7 main color-coded groups (R.O.Y.G.B.I.V). The top 10 allergens would be shaded red; orange: 5% frequency positive allergens; yellow: 4%; green: 3%; blue: 2%; indigo 1%; and violet < 1%. Gray codes new allergens on the tray or identifies those with no other recent information. An asterisk (*) is used to mark allergens with little relevance, despite high frequency.

This straightforward visual teaching tool might facilitate consideration of not testing some allergens if space on the back is limited or for cost considerations. Limitations are the inability, even for the experienced tester, to properly surmise the positive allergen(s) prior to testing and the possibility of missing a relevant allergen.

ALLERGIC CONTACT DERMATITIS (ACD) TO METHYLCHLOROISOTHIAZOLINONE (MCI) AND METHYLISOTHIAZOLINONE (MI) IN A FLUSHABLE MOIST WIPE

Daniel J. Hogan Bay Pines VA Healthcare System; NOVA Southeastern University College of Osteopathic Medicine

An 85 year-old man presented with a two year history of dermatitis of his lower legs despite treatment with hydroxyzine, topical triamcinolone, pimecrolimus, hydrocortisone butyrate, and fluocinonide. He had been prescribed hydrocortisone suppositories for itching from hemorrhoids. He had a past medical history of hypertension, hyperlipidemia and penicillin allergy.

Examination revealed erythematous eczematous plaques of the malleoli and the dorsal surface of his left foot and mild erythema of the perianal area.

He was patch tested to the T.R.U.E. TEST and the North American Series-Reduced (allergEAZE). At 48 and 96 hours he had patch test readings positive for benzocaine, MCI/MI and tea tree oil.

Subsequent history revealed a history of topical benzocaine and tea tree oil use. His wife found MCI/MI in his Equate® flushable wipes. His skin complaints were much better following avoidance of the above allergens and using formerly ineffective topical medications.

MCI/MI should have a concentration of < 15 ppm in rinse-off and <7.5 ppm in leave-on products. ACD to MCI/MI in flushable wipes is not commonly reported.

MCI/MI is in Pure 'n Gentles® (Wal-Mart), Equate® (Wal-Mart), CVS, and Natural Choice® flushable wipes. MCI is in Kleenex® Cottonelle Fresh® , Walgreens, and Cottonelle Kids® flushable moist wipes. Charmin Freshmates®, Wet Ones®, and White Cloud Unscented® flushable wipes do not contain MCI and/or MI.

FRAGRANCE PARADOX

Joseph F. Kerbleski, MD, Pamela Scheinman, MD, Tufts Medical Center, Department of Dermatology; Boston, MA.

Background: Fragrance ranks among the top 5 contact allergens worldwide. Nine percent of dermatitis patients (North America) reacted to fragrance mix (FM) on patch testing. But do FM reactions cause clinical dermatitis? Some have questioned the relevance of FM reactions.

Objective: We present a case to introduce the concept of a "fragrance paradox" that illustrates that factors besides sensitization and exposure may contribute to clinical allergic contact dermatitis.

Results: A 31 year old female massage therapist presented with intermittent bilateral dorsal hand and forearm dermatitis for 2-3 years, somewhat improved on weekends, and much better in summers. Patch testing was performed to a Tufts Medical Center standard, preservative, fragrance, rubber and textile series and several of her massage oils. Readings were performed and graded at 48 and 72 hours. Among her reactions at 72 hours

were the following: 1+ balsam of Peru, 1+ FM, 2+ lavender absolute, and 1+ propolis. She showed 1+ reactions to the following personal care and occupational products: lavender oil, tea tree oil, eucalyptus oil, and orange oil.

Conclusions: We suspect that factors such as increased xerosis and decreased humidity in winter lowered the threshold for reactivity and caused clinical dermatitis in this sensitized patient who was otherwise mostly, but not completely, asymptomatic with allergen exposure at other times of the year. Understanding a possible paradoxical nature of fragrance allergy has important implications in counseling FM allergic patients.

RESULTS OF THE 2008 ACDS MEMBERSHIP PRACTICES SURVEY

Rachel Schleichert, Medical Student; Matthew J. Zirwas, MD; The Ohio State University; Columbus, OH

Objective: Delineate practices used by the membership of the ACDS

Method: Anonymous Electronic Survey

Results: 99 members completed the survey. Detailed results will be presented. A summary of key findings includes:

- 66 respondents patch test 10 or fewer patients per month, 12 patch test 11-20 per month, and 20 patch test more than 20 per month.
- 57 respondents spend 25 minutes or less with patients on the initial evaluation, 40 spend 30 minutes or more.
- 61 respondents schedule 25 minutes or less for the final reading and education, 38 schedule 30 minutes or more.
- 60 respondents do not apply patches on the day of the initial evaluation, 40 do.
- 71 respondents perform 80% or more of patient education personally, 28 have staff perform 20% or more of patient education.
- 22 respondents have 65 allergens in their standard tray, 39 have fewer than 65, and 37 have more than 65.
- 46 respondents apply additional allergens to 50% or more of their patients, 52 apply them to less than 50%.
- 60 respondents find a clinically relevant allergen in 50% or more of their patients, 39 find a clinically relevant allergen in less than 50%.
- The wait time for patients referred for patch testing is less than 3 months 25 respondents, 3-5 months for 27, 6-11 months for 25, 12-23 months for 12, and 24 months or longer for 4.

NEW FUNCTIONALITY OF THE CONTACT ALLERGEN REPLACEMENT DATABASE (CARD)

James A. Yiannias MD, Mayo Clinic College of Medicine, Scottsdale, Arizona

One of the most challenging aspects regarding the management of allergic contact dermatitis is successful patient education on skin care product allergen avoidance. The following "New for 2009" electronic resources from the ACDS can facilitate this process. (www.contactderm.org)

1. CARD continues to provide skin care product "shopping list" for patients, free of an unlimited number of allergens and their cross reactors
2. Unique Patient Allergen Code (UPAC)
 - a. Create an updated shopping list for your patients without re-entering all of their allergens
 - b. CARD will generate a reusable code (UPAC), unique to the combination of allergens the user has entered, so that the user can simply enter the code (rather than all the allergens) in order to create an updated shopping list.

3. Searchable Allergen Entry

- a. When entering a patient's allergens, CARD will search for the closest matching root word
- b. For example, users need not know CARD's exact nomenclature to enter the allergen, 2-hydroxy-4-methoxybenzophenone-5-sulfonic acid. Simply entering the root word "benzophenone" would retrieve several allergen choices for the user to select.

Fisher Lecture

HISTORY OF PATCH TESTING

Jean-Marie Lachapelle, MD (Belgium)

General Session

EVALUATION OF A SELF-TEST DEVICE IN ALLERGIC CONTACT DERMATITIS

Peter Elsner (1), Henriette Bjarnoe (2), Werner Aberer (3), Jochen Brasch (4)

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Background: Patient self-testing is not only of interest in internal medicine, but also in dermatology considering the scarcity of dermatologic resources in many parts of the world.

Objective: To assess the agreement of a self-patch testing by subjects suspecting contact sensitization to nickel and/or fragrances with the dermatologists' reading of the test with nickel and fragrance mix as allergens.

Methods: Open, non-randomised, multicenter diagnostic trial approved by the ethics commissions of the involved institutions and in accordance with the Helsinki Declaration.

Results: 165 subjects self-tested the ready-made patch test product. The test was applied for 48 hours and read after 3 or 4 days. The test was also evaluated independently by experienced dermatologists after 3 or 4 days. In the 162 evaluable subjects the proportion of agreement for both allergens together was 89.5% (95% CI 83.7-93.8), the sensitivity 97.5 % (95% CI 86.8-99.9), and the specificity 86.9% (95% CI 79.6-92.3). Cohen's kappa was also high with 0.749 (95% CI 0.637-0.862). Apart from itching-and burning sensations and tape irritation, no side effects were observed.

Limitations: Discrepancies between the subjects' and the dermatologists' reading were mainly due to the interpretation of irritant or doubtful reactions as positive by the subjects.

Conclusion: The present study showed a high concordance rate between the subjects, self-reading on the upper arm and the dermatologist's reading. The upper arm proved to be an appropriate area for self-testing. Self-testing may improve the screening for contact sensitization for patients especially in areas with scarce dermatologic health resources.

CIGARETTE ALLERGY

Zoey R. Glick, BA, Nazanin Saedi, MD, and Alison Ehrlich, MD, MHS
The George Washington University School of Medicine

Cigarettes are widely known to contain potent carcinogens and their smoke contributes to many chronic and potentially fatal diseases. Cigarettes may also represent an under-reported and under-recognized cause of allergic contact dermatitis (ACD). Potential allergens from cigarettes can be found in the filters, paper, and tobacco. This presentation will review the current literature on ACD to cigarettes; to understand the clinical manifestation of ACD to cigarettes; to recognize components in cigarettes as potential sources of ACD; and to describe how to patch test patients with suspected ACD to cigarettes.

VULVAR ALLERGIC CONTACT DERMATITIS TO CLOTRIMAZOLE

Samantha K. Pullen, Erin M. Warshaw. University of Minnesota, Minneapolis MN

A 47 year old female presented with a 3-year history of pruritic and vesicular vulvar dermatitis which began following the use of over-the-counter vaginal suppositories for treatment of a presumed yeast infection. Despite multiple negative vaginal KOH exams and cultures, she had been treated systemic antibiotics, oral fluconazole, nystatin powder, clotrimazole cream, A& D ointment, and clotrimazole/betamethasone cream as well as topical and oral corticosteroids. Biopsies were consistent with chronic allergic contact dermatitis and lichen simplex chronicus. Physical exam showed bright pink, lichenified plaques with excoriations over the mons pubis, labia majora, lateral thighs, inguinal folds and buttocks, sparing the labia minora and vaginal mucosal surfaces.

Patch testing with the NACDG standard tray, corticosteroids, antifungals (including clotrimazole, ketoconazole, econazole and nystatin), vehicles, preservatives, acrylates, plastics and glues, and personal products showed the following reactions: 5% clotrimazole in petrolatum (D3+/D5+), clotrimazole 1% cream (D3+/D5+), and two different clotrimazole and betamethasone creams (D3+/D5-).

Clotrimazole, a phenmethyl imidazole, is a rare sensitizer with only seven previously published cases. Cross-sensitivity to other imidazoles is rare. The structural classifications of topical antifungal agents and published cases of allergic contact dermatitis to this unusual allergen will be reviewed.

SKIN PROTECTION PRODUCTS AGAINST LIPOPHILIC IRRITANTS - DO THEY REALLY WORK?

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2 Convenor of the working group Skin protection in the Expert Committee Personal Protective Equipment, German Association of Occupational Health Insurance Companies, Germany

Introduction: Skin contact to lipophilic substances at the workplace may contribute to the development of occupational irritant contact dermatitis in professions such as painters, varnishers and mechanics. Although protective gloves should preferably used as personal protective measures against solvents, protective ointments claimed against lipophilic substances are in widespread use. These are especially used in case of occasional skin contacts to solvents in the work process. Up to now, standardized in vivo efficacy tests for these cosmetic preparations are not performed, due to difficulties in efficacy testing with the respective irritants and conflicting results.

Material and Methods: In a newly developed 12-day human in vivo cumulative irritation model two lipophilic substances were used as standard irritants in a double-blind randomised study. Six commercially available skin protectants claimed against organic solvents by the suppliers were tested for their efficacy to protect against irritation induced by the solvents on test areas located on the back. The irritant reactions were quantified using visual scoring as well as bioengineering methods, such as skin hydration measurements and measurement of transepidermal water loss. The reaction intensities induced in the protected fields were compared to fields treated with the irritants only. Results: Both irritants alone induced significant decrease of skin hydration over time. Only insufficient skin protection was provided by all products tested. Moreover, one product even aggravated the dehydration caused by both irritants. When considering the results of the clinical scoring, these results were affirmed in general.

Discussion: Using this model we were able to quantify the protective efficacy against difficult lipophilic skin irritants. For cosmetics marketed as protective against solvent exposure at the workplace preceding standardized efficacy testing is warranted. In conclusion, appropriate gloves should be preferred in first instance against occasional solvent contact.

ALLERGIC CONTACT DERMATITIS FROM CARMINE

Daniel W. Shaw, M.D., University of California, San Diego, Division of Dermatology, San Diego, CA

A 28 year old woman developed allergic contact dermatitis within 6-24 hours of using multiple eyeshadows and lipsticks, all of which contained carmine. Extensive patch testing was positive only with carmine 2.5% in petrolatum. She also had a positive antecubital repeat open application test with the carmine patch test material after 13 days of twice daily applications. Twenty other patients with suspected cosmetic-related contact dermatitis had negative carmine patch tests. The patient has had no further contact dermatitis after two years of using at least ten different eyeshadows and lipsticks without carmine. Carmine is a widely-used colorant derived from gravid cochineal insects. These insects, mostly *Dactylopius coccus*, parasitize and are harvested from various species of prickly pear cactus (*Opuntia* spp.) Carminic acid is the source of the color. Allergic contact dermatitis from carmine has been reported in one previous publication describing three patients. The specific ingredient of carmine that causes allergic contact dermatitis has not been investigated.

In contrast, there are at least 30 published cases of immediate hypersensitivity reactions from carmine. These have included anaphylaxis from foods and beverages, contact urticaria from cosmetics, and occupational asthma. Residual cochineal insect proteinaceous material present in carmine has been shown to cause these IgE-mediated reactions.

POSITIVE PATCH TEST REACTIONS TO RETAPAMULIN OINTMENT IN TWO PATIENTS

Erin M. Warshaw and Diane R. Baker. Minneapolis MN and Portland OR

The first patient was a 40 year old atopic female who presented with a 4-year history of a pruritic and vesicular hand dermatitis which had recently spread to involve her arms, legs, hips, back and perioral area. Previous treatments included multiple topical corticosteroids, immunomodulating agents, sodium sulfacetamide with sulfur, salicylic acid, retapamulin ointment, and mupirocin ointment. Patch testing with the NACDG standard tray, corticosteroids, vehicles, preservatives, flavorings, corticosteroids, cosmetics, and 30 personal products showed reactions to retapamulin ointment (2+) and azelaic acid gel 15% (2+).

The second patient was a 6 year old girl with type I diabetes who presented with an acute, pruritic vesicular dermatitis of her wrists, ankles and right knee confined to areas covered by bandages. Previous treatments included oral antibiotics, retapamulin ointment, and oral prednisone. Patch testing to the NACDG standard tray

and personal items (retapamulin ointment, rubber boots, facial wipe, shampoo, Medi-Alert bracelet) showed reactions to retapamulin ointment (3+), neomycin (1+), balsam of Peru (1+) and potassium dichromate (1+). Retapamulin is a semisynthetic pleuromutilin antibiotic approved in the U.S. in 2007 for treatment of impetigo. It is currently formulated in a vehicle of petrolatum (Altabax™). Dermatologic side effects reported in clinical trials of Altabax™ include: application site pruritus (1.9%), application site irritation (1.6%), pruritus (1.5%), and eczema (1.0%). Contact dermatitis was reported in <1% of study patients.

DERMOGRAPHISM PRESENTING AS CONTACT DERMATITIS TO SPECTACLE FRAMES

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A 43yo self-described "sunglass queen" presented for further evaluation of a pruritic rash on the bridge of her nose and tops of her ears that recurred whenever she wore glasses, requiring systemic corticosteroid treatment on several occasions for associated eyelid and facial swelling. The patient was evaluated separately by an allergist and by a dermatologist specializing in contact allergy. Patch testing was performed on two occasions and showed positive reactions to nickel, cobalt, balsam of Peru, and ethyl cyanoacrylate but these allergens could not be confirmed as relevant to the condition. Dermographism was noted by the referring dermatologist though not felt to be related to the patient's recurring eruption; she was treated with loratadine and hydroxyzine without improvement. Further history at the time of consultation revealed that the rash usually developed within minutes of putting on her glasses, then progressed over several days. Long-term antihistamine therapy with doxepin was initiated and has controlled the condition, allowing the patient to wear all of her glasses without recurrence of symptoms. Dermographism has been reported to mimic contact reactions to latex and topical medications. This case illustrates the importance of considering dermographism in the differential diagnosis of contact reactions and using high potency antihistamines when indicated.

Poster Abstracts

VALUE OF EXTENSIVE PATCH TESTING

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Extensive patch testing is defined as employment of special sets of allergens in addition to standardized routine set. This approach should increase sensitivity of epicutaneous testing and expedite the detection of sensitization. We have tested extensively 868 consecutive patients with contact dermatitis. Special sets were selected based on case history and clinical examination. Sensitization to at least one contact allergen was detected in 39% of patients tested solely by a routine set, whilst 52% were diagnosed by extensive testing. Combined use of routine, specialized and targeted testing may be considered as the gold standard of sensitization detection. When this approach was used, frequency of sensitization was increased to 63%. Frequencies of positive reactions detected with special sets were as follows: biocides 40%, ulcus-set 40%, hair-dressing 36%, industrial oils 30%, metacrylates 30%, dental 24%, cosmetics 19%, drugs 17%, epoxides 17%, textile 12%, plants 12%, rubber 11%, vehicles 8%, disinfectants 6%, perfumes&flavors 5%, and shoes 5%. Frequency of sensitization diagnosed by special sets reflects a level of specific suspicion raised at the time of decision which particular set should be used. On the other side, higher number of tested allergens simply means higher probability of detecting irrelevant sensitization. To some extent, this limitation is allergen-specific. We do not expect rapid expansion of extensive patch testing, however, we strongly recommend this approach in the cases of dermatitis with prolonged or relapsing course and defying treatment or preventive measures.

PHYSICIAN-PATIENT CONCORDANCE REGARDING RELEVANCE OF POSITIVE PATCH TESTS

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Background: The efficacy of patch testing may be enhanced by data allowing the physician to estimate the likelihood that results of a patch test reading are relevant to patients' dermatitis.

Objective: The goal of this study is to compare the rates of agreement between the physician's assessment of relevance at time of final reading and patient's report of whether avoidance of an allergen was needed to remain free of dermatitis.

Methods: We mailed 407 IRB-approved questionnaires to patients and 118 surveys were returned. We analyzed results for 91 patients reporting greater than 80% improvement of their dermatitis. Cross-reacting allergens tested on the same patient were combined for analysis. Cohen's kappa was used to assess inter-rater reliability.

Results: Cohen's kappa: all allergens: -0.067 (95% CI -0.24-0.10); nickelsulfate hexahydrate: -0.11 (95% CI -0.52-0.30); neomycin sulfate: -0.18 (95% CI -0.94-0.58); fragrance: -0.046 (95% CI -.044-0.36); formaldehyde and formaldehyde releasing preservatives: 0 (95% CI -1.3-1.3). For most allergens, agreement between raters was less than chance agreement excluding formaldehyde, where raters' agreement equals that of chance agreement. Sample size limits statistical significance.

Conclusion: Relevance may vary between allergens or with anatomic affected areas. Physician assessment of relevance at time of final reading is a poor measure of which allergens are responsible for the allergic contact dermatitis. This may have implications for when best to determine the relevance of certain allergens.

DIRECT OBSERVED THERAPY OF THE SOAK AND SMEAR METHOD FOR THE TREATMENT OF SEVERE ECZEMATOUS DERMATITIS IN THE COMBAT SETTING

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2LT Kristina Rustad, MSIV; Uniformed Services University of Health Science, Bethesda MD

Background: Skin ailments which are well controlled in traditional hospital settings may flare up in the combat setting due to the harsh environmental conditions. Eczematous dermatitis patients have an increased vulnerability to infection and are often unable to complete daily duties.

Objective: This report presents nine deployed patients with severe flares of eczematous dermatitis who had failed standard treatment. We employed direct observed soak and smear therapy to all patients and present their outcomes.

Methods: Nine male subjects, ages 18-40 years old were admitted to the hospital for three days to undergo the soak and smear technique twice daily. Patients received an Investigators Global Assessment (IGA) score on Days 0, 3, 7 and 14. On Days 0, 2, and 7 patients were asked to provide patient self-assessments and pruritis scores.

Results: Biopsies confirmed a diagnosis in seven of nine patients. Over the course of treatment there was a general trend of improvement in all scores. The investigators global assessment (IGA) [range 0-5] for cases of dermatitis decreased from Day 0 (mean = 4.0) to Day 14 (mean = 0.42). The patient self-assessment score (range 0-3) also decreased from Day 1 (mean =3) to Day 7 (mean = 0.57). The pruritis score (range 0-3) decreased from Day 0 (mean = 2.7) to Day 7 (mean = 0.29).

Conclusion: There was a significant improvement in the IGA, patient assessment and pruritis scores of all patients. These results indicate that soak and smear therapy may be an effective treatment for eczema patients refractory to conventional therapies.

CONTACT SENSITIZATION IN 414 HAND ECZEMA PATIENTS WITH RESPECT TO GENDER

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Objective: The purpose of this study was to investigate associations of occupational background and frequency to common allergens in HE patients as it relates to gender.

Methods: Patients referred with HE (n=413) between 01/1990 and 12/2006 underwent patch testing to the Hermal standard and supplemental series at the Massachusetts General Hospital, Contact Dermatitis Clinic. After obtaining approval from the Institutional Review Board, data were collected and analyzed. The χ^2 -test and Fisher's exact test were used for statistical analyses; $\alpha=.002$ was regarded as significant.

Results: 59.7% of patients were women. Comparing gender trends, significantly more females were employed in the medical/dental field ($p<.0005$), whereas males worked more in wet/irritant ($p<.0005$) and construction occupations ($p=.002$). Sensitization to fragrance mix ($p<.0005$) was observed significantly more frequently in females whereas in males epoxy resin was a common sensitizer ($p<.0005$). Allergic contact dermatitis (ACD) was the most frequent (~40%) final diagnosis for both genders. In contrast, males were more often affected by irritant contact dermatitis (ICD) and psoriasis.

Conclusions:

ACD was the most frequent cause of HE in our study. In addition wet/irritant occupations seem to play a major role in HE-affected males, reflecting the importance of ICD in this group. A higher risk of developing HE appeared to be in females using fragranced products and among those men working with epoxy resins.

Supported by the ACDS-Mentoring-Award

POSITIVE CONCOMITANT TEST REACTIONS TO ALLERGENS IN THE STANDARD PATCH TEST SERIES

Lilla Landeck, MD 1; Peter Schalock, MD 1; Lynn Baden, MD 2; Konrad Neumann, PhD 3; Ernesto González, MD 1

1 Harvard Medical School, Massachusetts General Hospital, Boston, MA, USA

2 Centre Dermatology, Newton, MA, USA

3 Charité-Universitätsmedizin-Berlin, Berlin, FRA

Objective: The purpose of the study was to identify significant correlations between positive test reactions in a screening series.

Methods: After obtaining approval from the Institutional Review Board, data were collected from charts reviewed for 1,235 patients undergoing patch testing to the Hermal-standard series at the Massachusetts General Hospital, Contact Dermatitis Clinic between 1990 and 2006. Angry back reactions were excluded. To evaluate for associations between allergens, the Fisher's exact test was used. Correlations were considered significant at $p \leq .0001$.

Results: Two or more positive reactions were seen in 411 patients (33.3%). The mean age in this group was 46.3 years, and 70.1% were women. Sensitizations to 8 pairs of allergens were found to have significant correlation ($p \leq .0001$). Allergens showing significant cross-reactions were Balsam of Peru/fragrance mix, formaldehyde/quaternium-15, formaldehyde/imidazolidinyl urea and quaternium-15/imidazolidinyl urea. In addition significant co-reactions were observed for fragrance mix/nickel sulfate, nickel sulfate/Balsam of Peru, Balsam of Peru/cobalt chloride and potassium dichromate/colophony.

Conclusion: The significant associated sensitizations were comprised of fragrances, metals and preservatives. In comparison to earlier studies, cross-sensitizations to preservatives were overrepresented in our study population. Perhaps this reflects a greater influence of these chemicals today. The co-sensitization of potassium dichromate/colophony may result from frequent co-occurrence in leather products and eye cosmetics.

SEVERE FACIAL OEDEMA AFTER HAIR DYING

Meltem ONDER, MD, Canan KEVLEKCI, MD, ANKARA, TURKEY

Severe facial oedema is one of the serious symptoms of hair dye allergy. P-phenylenediamine (PPD) is a well known hair dye ingredient. It has potential cause of allergic reactions. This investigation reports PPD containing hair dye allergic cases with a severe facial oedema. We present 7 cases with facial oedema and positive patch test to hair dye ingredients. Interestingly 6 of the patients were young adolescents and had a history of temporary black tattoo. As PPD containing temporary tattoos have become fashionable among adolescents, the risk of PPD sensitization has increased.

ALLERGIC CONTACT DERMATITIS TO COLOPHONY (ROSIN): A RETROSPECTIVE STUDY FROM 1999 TO 2008

Maria Scherrer , Ana Resende- Hospital das Clínicas- UFMG-Brazil

Background: Colophony is a complex of resin acids that can cause allergic contact dermatitis . The NACDG lists over 300 products that can contain rosin.

Objectives:

- 1- To describe the prevalence of colophony positive reaction;
- 2- To establish its relevance ;
- 3- To identify related sources and occupations;
- 4- To point out the main co-reacting allergens.

Methods: A total of 1,672 patients were patch tested during this period . 3% were positive to colophony. A retrospective data analysis was performed.

Results: A female dominance was seen (75%). 35% of the cases were related to occupational exposure (construction workers 15% , kitchen workers 6%, cleaners 4%, hairdressers 4% , others 6%) and 10% to home activities, due to clean products in 17%. Besides these , other sources of exposure were observed : cosmetic (33%) and shoes (17%). 6% of the cases were irrelevant and 29% polysensitized. Among the last ones, 47% were related to cosmetics. Turpentine (8%), balsam of peru (15%) and perfume mix (33%) were co-reacting allergens.

Conclusions: The frequency of positive reaction to colophony was similar to the one in other references, and the relevance was high. Occupational activities were the most important source of exposure followed by cosmetics. Polysensitization was seen in 29% of the cases. Turpentine , balsam of peru and perfume mix were the co-reacting allergens.

OCCUPATIONAL ALLERGIC CONTACT DERMATITIS (OACD) TO RUBBER IN A PATIENT WITH DYSTROPHIC EPIDERMOLYSIS BULLOSA

Maria Scherrer, Flavia Brandao - Hospital das Clínicas- UFMG-Brazil

Background: There are few references of epidermolysis bullosa with allergic contact dermatitis.

Case Report: A 39-year-old bricklayer who had presented dystrophic epidermolysis bullosa since the age of 2 months complained about extremely itchy vesicles and papule erythematous lesions on his hands and forearms for 7 months. A patch test was performed and showed 1+ reaction to PPD mix, hydroquinone, thiuran mix, ethylenediamine and perfume mix. After being told to avoid contact with them, the patient reported the clearing of the lesions.

Discussion: This association is rare. The cases previously reported were due to glutaraldehyde and doxepin which had been used to treat the former disease. This is the first case related to occupation. As the clinic manifestations of epidermolysis bullosa are very intense, the ACD diagnosis is not easily reached. This became clear in the case just reported , in which the lesions caused by the two diseases were similar and observed in the same areas. Awareness of this association is essential to improve the detection of such cases.

OCCUPATIONAL ALLERGIC CONTACT DERMATITIS (OACD) IN A GUM ROSIN EXTRACTOR

Maria Scherrer, Ana Junqueira – UFMG-Brazil

Background: Colophony is a resin obtained from coniferous trees. Gum rosin is the sap trapped from pine trees.

Objective: report OACD in a gum rosin extractor.

Case Report: A 30-year-old female rosin extractor presented eczematous lesions on the back of her hands, forearms, neck, face and legs for 10 months. She related the lesions to the job she later quit and reported their clearing. She admitted not wearing any protection equipment. She was patch tested to a standard tray plus the extracted resin as is, and diluted in 2%, 5% and 10% in petrolatum. The results were 2+ to resin as is, 2%, 5% and 10% in pet, 1+ to colophony, perfume mix, turpentine, epoxy resin, thimerosal, PPDA, nickel and hydroquinone. The patch tests to the resin in 2%, 5% and 10% in petrolatum were done in 11 controls, with negative results, except in one, who was also positive to colophony.

Comments: Colophony, turpentine and perfume mix are co-reacting allergens. Rosin consists of about 90% resin acids and 10% neutral matter; of the resin acids about 90% are isomeric with abietic acid, which is non allergenic. It is easily oxidized by air, and the oxidized resin acids are strong allergens. Commercially modified resins are more allergenic than natural resins. Although in the case reported the patient presented allergic contact dermatitis caused by natural resin, this allergy is rare.

ALLERGIC CONTACT DERMATITIS FROM 12-HYDROXYSTEARIC ACID, THE PRINCIPAL FATTY ACID IN HYDROGENATED CASTOR OIL

Daniel W. Shaw, M.D., University of California, San Diego, Division of Dermatology

A 34 year old male developed severe contact dermatitis from a lip balm and from a fragrance-free solid stick underarm antiperspirant / deodorant. Patch testing with the ingredients of the lip balm, supplied by the manufacturer, was positive with 12-hydroxystearic acid 10% in petrolatum (pet.). Subsequent serial dilution patch testing using 99.7% pure 12-hydroxystearic acid was positive to 0.001% pet. The implicated lip balm contained 7% 12-hydroxystearic acid.

Hydrogenated castor oil, present in the patient's deodorant, gave a positive patch test at 1% pet. The principal fatty acid present in hydrogenated castor oil is 12-hydroxystearic acid.

A castor oil patch test was positive at 100%; an antecubital repeat open application test was positive with castor oil 10% pet. Patch testing with 99.5% pure ricinoleic acid, the principal fatty acid in castor oil, was positive in serial dilution patch testing to 0.1% pet.

12-hydroxystearic acid (12-OH, C18:0) and ricinoleic acid (12-OH, C18:1) are each 18-carbon, 12-hydroxylated fatty acids, the latter being monounsaturated and less allergenic in this patient. Patch tests were negative with the analogous non-hydroxylated fatty acids, stearic acid (C18:0) and oleic acid (C18:1), indicating that 12-hydroxylation was required for allergenicity.

SKIN DISEASES AMONG HIV INFECTED PATIENTS: RESULTS OF ADVERSE DRUG REACTIONS

Inu Tiwari, Medical Student, Kathmandu, Nepal

Background: Patients with HIV infection and AIDS are affected with skin diseases including adverse reactions to drugs. Because these skin conditions can cause disfiguration so they may require discontinuation of essential drugs.

Methods: 450 HIV-infected members from various rehabilitation centers of Kathmandu were identified. We reviewed their medical records from 2005 to July 2008 to determine the frequency of dermatologic diagnoses. We compared the rates of visits per year for skin conditions by HIV-infected men, 20 to 45 years of age and HIV-infected women 20-50 years of age with those by non-HIV-infected patients.

Results: Out of 500 dermatologic diagnoses, there were 58 cutaneous reactions to drugs. Out of 450 HIV-infected patients, 298 (66 %) were given dermatologic diagnoses. There were 16 hospitalizations for cellulites, cutaneous drug reactions, eczema, atopic dermatitis or other skin problems. When the visit rates of non HIV infected men and women were compared with those infected, it was found that the visit rates were 3 folds higher for various infectious and inflammatory skin conditions. Drugs with the highest rate of cutaneous reactions included sulfadiazine, dapsone, topical steroids and Retinol A. The number of diagnoses of skin conditions increased according to the stage of disease: it was lowest in patients immediately before the documentation of HIV infection and highest in AIDS patients.

Conclusions: Cutaneous diseases are extremely common in HIV infected patients and their incidence increases as immune function deteriorates.

ALLERGIC CONTACT DERMATITIS CAUSED BY SKIN PAINTING WITH HENNA : CASE STUDY FROM KATHMANDU

Inu Tiwari, Medical Student, Kathmandu, Nepal

Background: Among Hindu persons, skin painting (pseudotattooing) temporarily with henna carries significant traditional and religious value. The artists use black henna mixtures to temporarily paint the skin. Emergence of allergic contact dermatitis after application indicates the presence of a skin sensitizer in such preparations.

Methods: A total of 250 people were enrolled in the study. The artist used black henna, a mixture of henna and p-phenylenediamine to temporarily paint the skin on hands, foot, around umbilicus, scapular region and at the back. The study group was tested for any allergic contact dermatitis.

Results: 122 patients developed allergic contact dermatitis after skin painting with black henna in India and Nepal. The delay of symptoms suggested previous sensitization in 59 patients and active sensitization in 63 patients. Of 63 patients who underwent patch testing, the results were positive for p-phenylenediamine in 57 patients and for p-toluylenediamine in 6 patients. These sensitizers are found in hair dye preparations.

Conclusions: These mixtures contains natural henna, a rare and weak skin sensitizer and chemical coloring agents, diaminobenzenes, such as p-phenylenediamine and/or diaminotoluenes. The long duration of skin contact, the high concentrations of sensitizing materials, and the lack of a neutralizing agent dramatically increase the risk of skin sensitization, which is why such substances are prohibited for direct skin application.

OCCUPATIONAL DERMATOSES FROM METALWORKING FLUIDS IN SLOVAKIA. DO WE PERFORM THE PATCH TEST CORRECTLY?

S. Urbancek 1; E Vrtikova 2; Z. Fetisovova 3; R. Vilcek 4

Dept of Dermatology (1) and Dept of Occupational diseases F.D.Roosevelt Hospital Banska Bystrica (4),
Dept of Dermatology, Hospital Nitra (2), Dept of Dermatology, University Hospital Martin (3), Slovakia.

Objective: Occupational dermatoses from metalworking fluids presents important proportion of total number of the occupational diseases in industrial regions.

Methods: Authors presents the retrospective analysis of the causes of the occupational dermatoses from metalworking fluids in three regions in central and west Slovakia (1,5 milion citizens approximately) since 2000 to 2007.

Results: Metalworking fluids were most frequent cause of occupational contact dermatitis and second most frequent group of the total number occupational dermatoses - 45/294 (33M and 12 F). 28 pts revealed an allergic (ACD) and 17 irritant contact dermatitis (ICD). The hand were affected in 28, both, hands and forearms in 17 pts. The most frequent implicated fluids were aqueous (synthetic) ones: Cimstar MB 604 (5x ACD, 2x ICD) and Castrol DC282 (1x ACD, 2x ICD). 34 patients were tested by special Trolab® metalworking battery : one positive reaction to chloroxylenol, triclosan, amerchol L101, dichlorophene, propylen glycol metylene (bis-methyl oxazolidine) and abietic acid has been present.

Discussion and conclusion: Metalworking fluids, mainly synthetic ones, are one of the most frequent causes of occupational contact dermatitis. Authors accent the problems concerning the correct performance of patch tests.

1. The first one is the exact detection of cutting fluid composition which is only generally described in safety leaflets
2. The second problem seems to be the discorcondance of patch test performance among different dermatologist, the misinterpretation and consequent legal implication of these results. Authors discussed in this context, whether all the "positive" tests with individual cutting fluids performed by non-experienced dermatologist are really positive.

Different ways of patch testing with individual substances are discussed. Specific standardized metalworking battery patch tests might be helpful in some cases. Authors stressed the need of unification of patch tests (e.g. adresssing the patient to the specialised centers) with respect to high legal responsibility of the exam.

SURPRISING FREQUENCY OF ALLERGY TO THE HOT TUB ?SHOCK? CHEMICAL POTASSIUM PEROXYMONOSULFATE

Matthew J. Zirwas, MD; The Ohio State University; Columbus, OH

Objective: Describe a group of patients with allergy to potassium peroxymonosufate (PPMS) used to ?shock? their hot tubs so that other contact dermatitis centers will be vigilant for this allergy.

Method: Case Series.

Results: A patient presented to the Ohio State University Contact Dermatitis Center in mid-2008 claiming allergy to PPMS used as a shock treatment in one of the swimming pools in which he exercised. The patient had deduced this based on his own investigation. Patch testing with ammonium persulfate (APS) resulted in a 2+ reaction, while testing with diluted PPMS resulted in a weak 1+ reaction.

After seeing this patient and beginning to ask all patients with widespread dermatitis about exposure to hot tubs, over the next 4 months an additional 4 patients were diagnosed with allergy to PPMS via strong reactions to APS and weaker reactions to diluted PPMS. All patients were male, over the age of 40, and had experienced prolonged, severe, widespread dermatitis prior to diagnosis. All 5 cleared following avoidance of hot tubs and pools treated with PPMS.

Two prior reports of allergy to PPMS exist in the literature. We suspect that this allergy is more common than has been appreciated and recommend that all patients with persistent widespread dermatitis and frequent exposure to pools or hot tubs be patch tested with APS.

Genesis of the American Contact Dermatitis Society

Although a young society, the roots of the American Contact Dermatitis Society (ACDS) go back five decades to the post-World War II era. During World War II, the importance of patch testing to occupational dermatology became fully appreciated. Following the war, clinics devoted to the study of contact dermatitis began appearing throughout Europe. Among the first was that at St. John's Hospital for Skin Diseases in London, England where, in 1953, Calnan, Cronin and Meara established their world-renowned patch testing clinic. The subsequent development of other clinics both in Europe and the United States furthered the extensive research in allergic contact dermatitis that had already taken place during the first half of the twentieth century.

One of the key problems that became apparent as patch testing proliferated was that different investigators were using different concentrations, vehicles and, in some cases, chemicals to detect a given allergy. Furthermore, the validity of these testing materials remained to be established. In recognition of the need to standardize patch testing, the Scandinavian Committee for Standardization of Routine Patch Testing was created in 1962. In 1967, the International Contact Dermatitis Research Group (ICDRG) was formed as an amalgamation of the numerous national European groups interested in contact dermatitis. Shortly thereafter, Howard Maibach enlisted Marion Sulzberger, Ernst Epstein, Alex Fisher and others to help found the North American Contact Dermatitis Group (NACDG), which was modeled after the ICDRG, of which Howard was a member. Throughout its infancy and adolescence, the NACDG remained an informal club whose membership was by invitation only. Nonetheless, the NACDG routinely hosted a half-day meeting, organized by Howard Maibach, in association with the annual meeting of the American Academy of Dermatology. Anyone interested in contact dermatitis was welcome to participate in this meeting (called "Short Reports") for the price of a brief presentation.

In the mid-1980's, this informal, "club-like" atmosphere of the NACDG and its "Short Reports" radically changed as a result of the Federal Drug Administration's (FDA's) decision to ban the further production and sale of patch test allergens in the United States pending validated efficacy studies. For much of the 1980's, the NACDG operated as a committee under Dermatology Services, Inc. (DSI). During this time, the principal mission of the NACDG was to perform the requisite research required for FDA's approval of Hermal/Trolab's twenty-allergen patch test kit. Meanwhile, in the absence of readily available allergens, interest in contact dermatitis was waning among American dermatologists. Worse yet, those few who remained committed to patch testing, but who were not members of the NACDG, were left with few outlets for the exchange of their ideas: short reports were difficult to generate when stripped of access to allergens. It was under these circumstances, in the late 1980's, that Bob Adams began to lobby within, and without, the NACDG for the creation of an open society to promote, stimulate, support, develop and publish information about contact dermatitis and occupational skin disease.

Founding of the ACDS

Although he encountered many naysayers who felt that neither an additional organization nor an additional publication was required in a specialty as small as dermatology, Dr. Adams persevered in his efforts to found the ACDS. Plans for the creation of the society began to crystallize during a Symposium on Contact Dermatitis, organized by Bob Adams and held May 20 - 23, 1988 in San Diego, CA. During the annual meeting of the NACDG on December 2, 1988, the launching of a new society became imminent when the research-oriented NACDG agreed to support a patch testing society geared to education. Critical backing to the society's founding soon came from the Committee on Contact Dermatitis of the American Academy of Dermatology (AAD), which was chaired by Bob Rietschel.

When it met on December 5, 1988, the AAD's Committee on Contact Dermatitis, under Dr. Rietschel's direction, finalized plans for what originally was to be called the "American Society for Contact Dermatitis". It was determined that Larry Rosenthal of DSI would develop guidelines for dues and that Bob Rietschel and Ron Brancaccio would solicit funds from industry to cover the costs of starting the society. The drafting of the society's bylaws was assigned to Jim Taylor, Art Daily and Bob Adams. The society's logo, which had been designed by

the medical illustrator at the Ochsner Clinic in New Orleans, was approved. The program committee for the first annual meeting was appointed and consisted of Ron Brancaccio, Bob Rietschel, Beth Sherertz and Steve Tucker. Various other committees within the society were organized and included the Industrial Liaison Committee headed by Jim Taylor and the Fisher Lecture Committee headed by Ron Brancaccio. Finally, the founding Board of the Society was appointed: Bob Adams (President), Toby Mathias (Vice President), Bob Rietschel (Secretary-Treasurer), Don Belsito, Ron Brancaccio, Art Daily, Ron Goldner, Dan Hogan, Howard Maibach, Beth Sherertz, Ed Shmunes, Jim Taylor and Steve Tucker.

On June 16, 1989, during the NACDG's and AAD's summer meeting in San Diego, CA, Bob Adams outlined the final plans for the society's inaugural meeting in San Francisco, CA later that Fall. In addition, it was confirmed that the society's name would be the American Contact Dermatitis Society (ACDS) rather than the American Society for Contact Dermatitis (ASCD, which was thought to be difficult to say and to potentially imply that the Society existed to foster contact dermatitis). Finally, Bob Adams and Carol Wolfe of W. B. Saunders Co. presented the operational plans for the *American Journal of Contact Dermatitis*, headed by founding editor, Bob Adams.

First Annual Meeting

After years of hard work and preparation by many, the first Annual Meeting of the ACDS was called to order by Bob Rietschel at 9:00 A.M. (PST) on December 1, 1989. The venue was the Marriott San Francisco Hotel, which fortunately had survived the quake (7.1 on the Richter scale) that had occurred just 6 weeks prior to our meeting and had devastated some parts of the city. The inaugural meeting, which the founding board had elected to organize itself in order to save costs, will long be remembered by those board members and their nurses who scrambled throughout the day to register participants, resolve audiovisual problems, co-ordinate beverage service, etc, etc. Despite this "cataclysmic" first meeting, the ACDS has grown over the past decade to include not only North American members from academia, industry and the private practice of medicine, but also colleagues from throughout the world.

During the 90's, the society's members have worked diligently to bring the collective visions of Bob Adams and its many other contributors to fruition. Programs such as the Fisher Resident Award (spearheaded by Fran Storrs), the Maibach Traveling Scholar Award (in honor of Howard's international focus) and the Nethercott Memorial Research Grant (which honors our deceased colleague James R. Nethercott, MD) are vital to the development of our subspecialty. The dissemination of knowledge at our meetings and through the journal, *Dermatitis- formerly the American Journal of Contact Dermatitis*, (which, due to the tenacity of former editor Walt Larsen, is now abstracted by the Index Medicus) has spurred a renewed interest in contact and other occupational dermatitides. In recognition of the vital educational role it plays, the ACDS was awarded the AAD's Excellence in Education Award in 1994 and the Gold Triangle Award in 2006.

To paraphrase Rudy Baer, the first Alexander A. Fisher, M.D. lecturer for the ACDS:

Whither dermatology when so many fail to appreciate the complexity of contact dermatitis.

Fortunately, the ACDS is changing that!

History of ACDS Presidents

1989-1990	Robert Adams, MD
1991	C. Toby Mathias, MD
1992	Ronald Brancaccio, MD
1993	James S. Taylor, MD
1994	Robert L. Reitschel, MD
1995	Frances Storrs, MD
1996	Elizabeth Sherertz, MD
1997	Joseph Fowler, MD
1998	Vincent De Leo, MD
1999	Melanie Pratt, MD
2000	Donald Belsito, MD
2001	James G. Marks, MD
2002	Patricia Engasser, MD
2003	David E. Cohen, MD
2004	Anthony A. Gaspari, MD
2005-2007	Kathryn A. Zug, MD
2007-2009	Erin Warshaw, MD

History of the Fisher Lectureship

The Alexander Fisher Lectureship is awarded in honor of Alexander Fisher, MD honoring his contributions to the field of contact dermatitis. The lecturer is selected based on his or her contributions to contact dermatitis, reflection of the spirit of Dr. Fisher's enthusiasm for the subject of contact dermatitis, and for sharing knowledge and experience in evaluating patients.

Recipients

2009	Jean-Marie Lachapelle, MD
2008	Denis Sasseville, MD
2007	Vincent De Leo, MD
2006	Magnus Bruze, MD
2005	Melanie Pratt, MD
2004	James G. Marks, Jr, MD
2003	Michael Bigby, MD
2002	Jere Guin, MD
2001	Elizabeth Scherertz, M.D.
2000	Richard J. G. Rycroft, M.D., FRCP, FFOM, DIH
1999	Joseph F. Fowler, Jr., M.D.
1998	Robert L. Rietschel, M.D.
1997	Ronald Brancaccio, M.D.
1996	Donald Belsito, M.D.
1995	James S. Taylor, M.D.
1994	No Meeting
1993	Howard Maibach, M.D
1992	Frances Storrs, M.D.
1991	Robert Adams, M.D.
1990	An Dooms Goossens, M.D.
1989	Rudolf L. Baer, M.D.

Fisher Resident Award

Each year, the American Contact Dermatitis Society presents the Alexander A. Fisher Resident Award for the best presentation by a resident, medical student or fellow at the scientific session of the annual meeting.

2008

Jason Bentow, MD (Gold)
William Love, MD (Silver)
Adam Asarch, MD (Bronze)

2007

Jeffrey Donovan, MD, PhD (Gold)
Travis Widman, MD (Silver)
Michael Paltiel (Bronze)
Leslie Castelo-Soccio, MD, PhD (Bronze)

2006

Jeffrey Donovan, MD, PhD (Gold)
Patricia Malerich, MD (Silver)
Josephine Okwechime, MD (Bronze)

2005

Divya Srivastava, MD (Gold)
Samara Mimesh, MD (Silver)
Denise Aaron, MD (Bronze)

2004

Glen Crawford, MD (Gold)
Samara Mimesh, MD (Silver)
Kelly DeHart, MD (Bronze)

2003

Simone Fahim, MD (Gold)
Mowza Al-Sowaidi, MD (Silver)
M. Joan Saary, MD (Bronze)

2002

Sharona Yashar, MD (Gold)
Sari Weinstein, MD (Silver)
Benjamin W. LeSueur, MD (Bronze)

2001

Joseph Kist, MD (Gold)
Jonelle McDonnell, MD (Silver)
Han Lee, MD (Bronze)

2000

Leigh Ann Scalf, M.D. (Gold)
Alison Ehrlich, M.D. (Silver)
Malinee Saxena, M.D. (Bronze)

1999

Renato M. Oracion, M.D. (Gold)
Rebecca C. Tung, M.D. (Silver)
Anastasia Drohan, M.D. (Bronze)

1998

Patricia Norris, M.D. (Gold)
Tiffani Hamilton, M.D. (Silver)
Victoria Taraska, M.D. (Bronze)

1997

Jay N. Gade, M.D. (Gold)
Kenneth A. Mark, M.D. (Silver)
J. Mark Jackson, M.D. (Bronze)

1996

Scott Racket, M.D. (Gold)
Bhavik Soni, M. D. (Silver)
Stuart Shanler, M. D. (Bronze)

1995

Lorna J. Fredrickson, M.D. (Gold)
Heidi D. Mangelsdorf, M.D. (Silver)
Cary L. Dunn, M. D. (Bronze)

1993

N.H. Nielson, M.D. (Gold)
Maria Paul, M.D. (Silver)
Jack L. Guccione, M.D. (Bronze)

1992

Stephanie Matten, M.D.

1991

Sandhyn Koppula, M.D.

1990

Joannes Grevelink, M.D.

1989

Michael Gette, M.D.

Clinical Research Fellowships

The American Contact Dermatitis Society offers fellowships for the purpose of relevant clinical studies directed toward the subject of contact dermatitis. Studies which focus on clinical problems or have applications to clinical problems will receive preferential consideration. These fellowships will not exceed \$5,000 each and will favor those in the \$3,000 to \$5,000 range.

One of the fellowships, the James R. Nethercott Clinical Research Award Fund, honors the memory and achievements of Dr. James R. Nethercott and will provide a clinical research award in the amount of \$5,000 for young investigators studying occupational dermatology and/or epidemiology of contact dermatitis.

2008 Awards

Nethercott Research Award

Tina Suneja, MD

Occupational dermatitis in machinists, mechanics and metal workers evaluated for suspected contact dermatitis

Nina Botta, MD

Positive Patch Test Reactions to Propylene Glycol: A Cross-Sectional Epidemiological Study of the NACDG Data from 1994-2006

2007 Awards

Nethercott Research Award

Sarah Schram, MD

Contact Dermatitis in North American Healthcare Workers

Britanny Wilson, MD

Sunscreen Allergens in Patients Who Report Having a "Reaction" to Sunscreens

2006

Nethercott Award

Daniel E. McGinley-Smith, MD

Pediatric Contact Dermatitis, The NACDG Experience

Travis Widman, MD

Allergic Contact Dermatitis to Medical Adhesive Bandages in Patients who Report Having a "Reaction" to Medical Bandages

2005

Nethercott Research Award

Valerie Harvey, MD

An Analysis of Paraben Sensitivity in Patients Treated with Aldara

Sharon Jacob, MD

An Improved Delivery System for the Atopy Patch Test

2003*Nethercott Research Award*

Glen H. Crawford, M.D.

Ascertainment of Hand Dermatitis Validating an Occupational Skin Questionnaire

Sachin Bhardwaj, M.D.

A Double-Blind, Randomized, Placebo Controlled Trial Comparing Topical Immunomodulating Agents and Corticosteroids for Treatment of Experimentally Induced Nickel Contact Dermatitis.

2002

(No Nethercott Award)

Christina Shaffer, M.D., M.P.H.

Allergenicity & Cross-Reactivity Of Coconut Oil Derivatives

2001*Nethercott Award*

Eric Simpson, MD

Oregon Health Sciences University

Project: Prevalence of Contact Allergy to Plant Extracts in Users of Botanical Products"

Christina Anderson, MD

Correlation of the house dust mite patch test with RAST and prick testing in atopic patients with and without atopic dermatitis

2000*Nethercott Award*

Lori Schaen, MD

Vulvar Pruritus and Allergic Contact Dermatitis

Erin Warshaw, MD

Effectiveness of a Convenient and Cost-Effective Method of Patch Testing

1999

Han N. Lee, MD

Cross Reactivity Between Epoxy Acrylates and New Epoxy Resins in Patients with Prior Epoxy Sensitivity

Alison Ehrlich, MD

Metal Allergies – The Role of Body Piercing

1998

Micsunica-Elvira St. Chiritescu, MD

The Correlation Between the Allergy to the Metal/Cement Constituents of the Total Hip Prostheses and Aseptic Loosening of the Total Hip Replacement Implants

Marylou Thelmo, MD

Mechanism of Irritant Dermatitis in Man

1997 CRF Winners

Paul Harrison, MD

The Effect of Topical Amiloride on Urushiol Patch Test Reactivity in Subjects with Poison Ivy/Poison Oak Cutaneous Hypersensitivity

Robin Schaffran, MD

Prevalence of Gold Sensitivity in Asymptomatic Individuals with Gold Dental Restorations

Shari L. Skinner, MD

Allergic Contact Dermatitis to Preservatives in Topical Medicaments

Kathryn A. Zug, MD

A Clinical Value Compass Approach Assessing the Multidimensional Outcomes of a Patch Tested Population

ACDS Mentoring Award

ACDS mentoring awards are granted for the purpose of assisting young dermatologists including dermatology residents, dermatology fellows, or **dermatologist up to 5 years out of residency** to become leaders/experts in the field of contact dermatitis by acquiring additional professional skills which may not be available at their training institutions.

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