Scientific Tracks & Abstracts
(Day 1)
Track 1: Dermatological Diseases
Track 2: Esthetic and Cosmetic Dermatology

Session Chair: Alwyn Rapose
Reliant Medical Group, USA

Session Co-chair: Dorothee Nashan
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Session Introduction

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Ajay K Banga, Mercer University, USA

Title: Antibiotics for skin infections
Alwyn Rapose, Reliant Medical Group, USA

Title: Epigenetic studies of oral lichen planus as a model for inflammation-mediated cancer development via malignant reprogramming
Nasim Fazel, University of California, Davis, USA

Title: Herpes Zoster: Conundrums and controversies
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Title: Two different regimens of oral isotretinoin for treatment of acne vulgaris
Hesham M Ahmad, Al-Minia University, Egypt

Title: Off label uses of vitamin-D treatment in dermatology
Ufuk Kavuzlu, Mersin University Faculty of Medicine
In recent years, there has been increasing interest in active energy or minimally invasive technologies for cosmetic use and also to expand the scope of transdermal delivery to hydrophilic molecules and macromolecules. These molecules do not normally pass through the skin unless enabling technologies are used. Recent innovations in these technologies, especially for iontophoresis and microporation, will be presented. Microporation involves the creation of micron-sized micropores or microchannels in the skin which can then allow the transport of water soluble molecules. Skin microporation can be achieved by microneedles or by using thermal, laser, or radio-frequency ablation. Iontophoresis involves the application of small amounts of physiologically acceptable currents to drive ionic molecules into the skin. Technology behind products on the market such as Biobliss™, Dermaroller™, WrinkleMD™ and Zecuity® will be discussed. The author has done significant research with both techniques in his laboratory with over 50 different drug molecules and cosmeceuticals.

Biography

Ajay K Banga is Professor and Department Chair in the Department of Pharmaceutical Sciences at the College of Pharmacy and Health Sciences, Mercer University, Atlanta, GA. He also holds an Endowed Chair in transdermal delivery systems. He has a PhD in Pharmaceutics from Rutgers University, NJ. He has over 250 publications and scientific abstracts to his credit. He currently serves on the Editorial Board of 10 journals, as Associate Editor for one journal, and has served as the Editor-in-Chief for a Drug Delivery Journal. He has written three single author books and over 10 book chapters in the areas of transdermal delivery and protein formulation/delivery. He is a Fellow of the American Association of Pharmaceutical Scientists.

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Antibiotics for skin infections

Alwyn Rapose
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Infections of the skin can be caused by bacteria, fungus, virus and rarely parasites. Bacterial skin infections can be mild like impetigo and folliculitis, managed with topical medications, or severe – like abscess and necrotizing fasciitis requiring surgery, hospitalization and intravenous antibiotics.

Over the last decade, there has been an increase in the number of severe bacterial skin infections - often associated with methicillin-resistant-staphylococcus-aureus (MRSA) - resulting in increased number of visits to emergency rooms. There is also a trend towards increasing hospital admissions for skin and skin-structure infections resulting in increased health-care costs. Host factors like diabetes, peripheral vascular disease as well as obesity contribute to the morbidity associated with these infections. Surgical site infections deserve special attention as the organisms associated with these are often acquired from the health-care environment.

Early intervention with appropriate antibiotics results in improved outcomes. Deep wound cultures help target antibiotics to the organism identified. Outpatient intravenous antibiotic therapy (OPAT) has helped reduce duration of hospital stay.

Vancomycin is considered the “gold-standard” for management of MRSA infection, but newer oral and intravenous antibiotics with improved safety profiles have expanded options for management of these infections.

Biography

Alwyn Rapose obtained his Doctorate in Dermatology/Venereology/Leprology from King Edward VII Memorial Hospital, Bombay, India. Thereafter he obtained an MD in Internal Medicine from St. Vincent Hospital, Massachusetts, USA, followed by a Fellowship in Infectious Diseases at the University of Texas Medical Branch, Galveston, Texas, USA. He was a recipient of the NIH/NIAID supported UTMB postdoctoral research grant in Emerging and Reemerging Infectious Diseases. In July 2014 he was elected fellow of the American College of Physicians. He is presently Assistant Professor of Clinical Medicine at the Reliant Medical Group and St. Vincent Hospital in Massachusetts, USA. Dr. Rapose is board certified in both Infectious Diseases and Internal Medicine.

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Notes:
Epigenetic studies of oral lichen planus as a model for inflammation-mediated cancer development via malignant reprogramming

Fazel N, Tepper C G, Izumiya Y, Murphy W J and Davari P
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Oral lichen planus (OLP) is an oral mucosal disease considered to be a pre-malignant condition with risk of malignant transformation to oral squamous cell carcinoma (SCC) at varying rates ranging from 0.8% to >5%. Studies of loss of heterozygosity and microsatellite instability indicate that OLP is molecularly distinct from oral dysplasias and SCC. The operating hypothesis for our studies is that tumors, such as SCC, arise through “malignant reprogramming” driven by a combination of both genetic and epigenetic changes. The primary goal of this pilot study is to identify key sites of aberrant epigenetic regulation in OLP by defining the entire repertoire of differentially-expressed genes and regulatory non-coding (ncRNAs) in OLP lesions. This is accomplished by performing state-of-the-art next-generation sequencing (NGS)-based whole transcriptome profiling (RNA-Seq) analyses of matched pairs of lesional and perilesional normal appearing tissue samples. The specimens were sectioned for RNA extraction, chromatin immunoprecipitation (ChIP), and immunohistological studies. Sequencing libraries prepared from the total RNA samples were sequenced on an Illumina HiSeq 2000 to yield ~30 million reads per sample, which will then be processed with our automated analysis pipeline. Subsequently, integrative bioinformatics was applied to define an OLP-specific gene expression signature, as well as application of gene set enrichment analysis to define potential overrepresentation of functional groups, including immune system and inflammatory pathway-related genes. Insight into the mechanistic basis engendering these expression changes was obtained by correlation with the occurrence of somatic mutations (variant analysis) and epigenetic changes, such as histone modifications. We anticipate that characterization of the latter will lead to the identification of the responsible histone-modifying enzymes, which can then be exploited as novel therapeutic targets.

Biography

Fazel N, MD, DDS, MAS, Associate Professor of Dermatology, completed her medical school training at the University of Michigan, Ann Arbor followed by her dermatology training at Henry Ford Health System in Detroit, Michigan. Prior to her medical training she completed her dentistry training at Northwestern University Dental School. She has a unique background with dual certification in dermatology and dentistry. She has a special interest in the medical management of oral mucous membrane disease and soft tissue pathology. Her background in dentistry provides for insight into the pathophysiology and treatment of aphthous ulcers, burning mouth syndrome, oral lichen planus, and oral vesiculobullous disease (e.g., pemphigus and pemphigoid). She is regarded as a leading expert in the field of oral mucosal disease by many colleagues who refer these difficult and challenging conditions to her.

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Notes:
Herpes zoster: Conundrums and controversies

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Herpes zoster presents significant clinical and fiscal morbidity for patients and providers. From acute and chronic wound and pain conditions to vaccination strategies and infection control measures, its ramifications intertwine between many medical disciplines and governing bodies. A recent study of health care economic burden notes that herpes (including zoster) is one of the top 5 most costly categories of skin disease. Moreover, medical providers differ widely in their approaches to the management of herpes zoster. For instance, the literature wavers in its recommendations for prevention of post-herpetic neuralgia, yet a well-done recent study has shed light on the effectiveness of antiviral and gabapentin regimens. Also, vaccination strategies for herpes zoster are inconsistent. It is currently recommended in patients over 50, and very few surveys have evaluated patient compliance since its FDA approval. In current clinical settings, it is unclear who should be taking the lead (primary care vs. specialists) for its employment, despite its positive safety and efficacy profile. In addition, hospital isolation policies for patients and staff with or exposed to herpes zoster are often inconsistent, misunderstood, outdated, or poorly outlined in institutional handbooks. Furthermore, the difference in infectivity between native varicella and subsequent herpes zoster is often misinterpreted. A disease entity with such disparate management strategies should be clarified. By summarizing the pathogenesis of herpes zoster and the efficacy of its treatment and vaccination, in addition to outlining the best practices given recent literature, dermatologists, physician extenders, and other medical providers will be better able to determine the appropriate course of treatment, isolation measures, and education of zoster patients. In addition, hospital isolation policies for patients and staff with or exposed to herpes zoster are often inconsistent, misunderstood, outdated, or poorly outlined in institutional handbooks. Furthermore, the difference in infectivity between native varicella and subsequent herpes zoster is often misinterpreted. A disease entity with such disparate management strategies should be clarified. By summarizing the pathogenesis of herpes zoster and the efficacy of its treatment and vaccination, in addition to outlining the best practices given recent literature, dermatologists, physician extenders, or other medical providers will be better able to determine the appropriate course of treatment, isolation measures, and education of zoster patients.

Biography
Lorraine L Rosamilia is a Staff Dermatologist with the Geisinger Health System, practicing in State College, PA. She received medical school and residency training in dermatology at the Penn State Milton S. Hershey Medical Center in Hershey, PA, and has particular interest in resident and primary care teaching and scientific journal editing. Her practice focus includes medical dermatology, namely psoriasis, acne, infectious disease, and skin malignancy.

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Notes:
Actinic keratoses: A west European view

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High incidences of actinic keratoses, the pathophysiologically proven and accepted transition of AK into SCC and the resulting unacceptable mortality rate unify world-wide medical efforts in improving early diagnoses and therapies of AKs. A spectrum of efficient therapeutic options is available. Guidelines and recommendations from across Europe - Germany, Great Britain, France, Italy, and Spain – underline interest in the assessment, acceptance and use of therapeutic options, but also reveal diverse attitudes towards these aspects. Efforts to combat AKs include primary and secondary prevention. The evaluation of treatment includes a consideration of effectiveness, sustainability and tolerability of procedures, as well as response rates. An incredible number of publications concerning catchphrases like actinic keratoses, therapy, studies and response rate and spinalioma development complicate a survey. Useful up-dates, critical reviews and recommendations are continuously published. The number and grades of AKs, the size of the area treated, and in particular the duration of follow up are different, often making comparisons unbalanced. Cochrane based data analyses and meta-analyses confirm those difficulties whilst offering a ranking of standard interventions. Shouldn’t we ask for a more normative procedure concerning the goals of our studies? Where is the common denominator in requirements? Besides personal expertise and equipment, the individual decision for the treatment of AKs should be based on the best possible evidence. Algorithms and increasing demand of sequential therapies will profit. All countries agree on the necessity of early treatment, and with the focus on point and field treatment, with increasing interest in long-term success, including in cases of field cancerisation. Implementation in daily practice and further requirements shall be discussed.

Biography

Dorothee Nashan is Professor and Head of Department of Dermatology, Klinikum Dortmund, Germany. She is specialist in dermato-oncology focus on melanoma, cutaneous lymphoma and palliative care. Her education included scientific work in biochemistry and immunology in reproductive medicine (Max Planck Society, Harvard Medical School), clinical education in the Departments of Dermatology, University of Münster and Fribourg. Continuously publishing papers and serving as an editorial board member of repute she is engaged in the promotion and education of young colleagues inter alia in connection with the German Society of Dermatology.

Notes:
Cutaneous metastatic disease: Diagnostic and prognostic values in a tropical setting

Maurice Efana Asuquo
University of Calabar, Nigeria

**Background:** Cutaneous metastasis is valuable though with infrequent occurrence in clinical practice. It is of esteem value in diagnosis as well as treatment of cancer due to the ease of accessibility for clinical examination and biopsy.

**Method:** Patients who presented with histologic diagnosis of cutaneous metastatic malignancies at the University of Calabar Teaching Hospital, (UCTH), Calabar, Nigeria from 2010 to 2013 were studied and compared with total number of patient with cutaneous malignancies seen over the same period.

**Results:** Sixty histologically diagnosed cutaneous malignancies presented to UCTH, Calabar, [55(92%) patients with primary cutaneous malignancies while 5(8%) were metastatic cutaneous cancer]. The 5 patients comprised 2 men and 3 women with ages that ranged from 37-75 years (mean 59.2 years). The site distribution was 3(75%) anterior abdominal wall [2- umbilicus, Figure 1a, 1- laparotomy scar], 1- Back – left scapular region and 1 – wide spread cutaneous lesions (from head to the foot), Figure 2a. Two (40%) patients presented with malignant intestinal obstruction, Table 1. The histology of the cutaneous lesions revealed, 4 (80%) patients with metastatic adenocarcinoma, Figure 1b, 3 from proven colonic sites, one suspicious and one with metastatic olfactory neuroblastoma, Figure 2b. The later was the patient with wide spread cutaneous lesions. These nodules remarkably occurred during chemotherapy and radiotherapy for the primary left eye lesion that appeared to be responding to therapy. The outcomes were uniformly poor due to advanced primary lesions at presentation.

**Conclusion:** Evaluation of skin provides valuable insights into underlying malignant process and often of diagnostic and prognostic value. Clinicians are urged to show interest in cutaneous nodules in view of the estimable value by subjecting such for histological evaluation.

**Biography**

Maurice Efana Asuquo is the Professor/Chief Consultant Surgeon, FWACS, FICS, University of Calabar/University of Calabar Teaching Hospital, (UCTH), Calabar, Nigeria. Served as the Head of Department of Surgery, University of Calabar, Dean, Faculty of Medicine & Dentistry and currently Provost College of Medical Sciences. His major research interest is dermatological oncology. Head of the Oncology unit of UCTH, Calabar, Nigeria. Attended several International and Local conferences, presented several papers on dermatological oncology and member of Dermatology-2014/2015-Organising Committee. He pioneered research resulting in over 80 publications.

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**Notes:**
Development, characterization and skin delivery studies of related ultradeformable vesicles: Transfersomes, ethosomes and transehtosomes

Andreia Ascenso
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Introduction & Aims: Ultradeformable vesicles (UDV) have recently become a promising tool for the development of improved and innovative dermal and transdermal therapies with numerous advantages over the conventional delivery systems. The aim of this research work was to study three closely related UDV, Transfersomes (T), Ethosomes (E) and Transehtosomes (TE) in different situations, such as a high, medium and low active incorporation efficiencies obtained with actives of distinct polarities (Vitamin E, Melatonin and Caffeine, respectively).

Methods: The actives were incorporated in the three UDV formulations in which characterization parameters corresponded to: The mean vesicles size and polydispersity index measured by photon correlation spectroscopy; zeta potential determined by laser-doppler anemometry; viscosity; deformability evaluated by pressure driven transport; active loading and entrapment yield determined by HPLC assay of each active before and after the separation of the non incorporated fraction by ultracentrifugation, and finally, incorporation efficiency in which the lipids assay was based on an enzymatic-colorimetric test. After this characterization, topical delivery studies were performed in order to compare the selected UDV formulations regarding the release, skin permeation and penetration profiles.

Results: All UDV formulations showed size values within the expected range, except Transehtosomes prepared by method A ("transfersomal" method), where size was less than 100 nm in contrast to what happened in method B ("ethosomal" method). Zeta potential was negative and higher for formulations containing sodium cholate. The Incorporation Efficiency was much higher for Vitamin E than Caffeine -loaded UDV as theoretically expected attending to the respective Log P. In general, it was obtained the following order for UDV flux: TE > E ≥ T. This result was consistent with the release and skin penetration profiles for Vitamin E- loaded UDV. However, the results were totally the opposite for Caffeine-loaded UDV, which might be explained by the solubility and thermodynamic activity of this active in each formulation instead of the UDV deformability attending to the higher non incorporated fraction of Caffeine.

Conclusion: Attending to the results obtained, Transehtosomes are more deformable than Ethosomes and Transfersomes due to the presence of both ethanol and surfactant in their composition. These UDV are suitable for a deeper skin penetration.

Biography
Andreia Ascenso has completed her PhD in Pharmaceutical Technology from Faculty of Pharmacy, University of Lisbon with final grade summa cum laude. She is Professor of Pharmaceutical Technology since September 2005. She has published and reviewed more than 10 papers in international journals with peer review. She has 8 oral communications in reputed conferences. She serves as an editorial board member on Carrier-Mediated Dermal Delivery: Applications in the Prevention and Treatment of Skin Disorders Book, Pan Stanford Publishing since 2014.

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Notes:
Two different regimens of oral isotretinoin for treatment of acne vulgaris

Hesham M Ahmad
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Acne vulgaris is a common condition that represents a physically and emotionally debilitating disorder and requires an adequate treatment. This work assess the clinical efficacy, side effects and laboratory changes of serum lipids and liver function during oral isotretinoin therapy for acne vulgaris, comparing single versus twice-daily dose regimens. 58 patients with acne vulgaris were included and classified into: Group I (26 patients) received once daily dose and Group II (32 patients) received a twice daily dose of oral isotretinoin. Global acne scoring system was used to objectively determine acne severity and to evaluate clinical improvement. Serum cholesterol, triglycerides, ALT and AST were evaluated before and 3 months after treatment. Both regimens resulted in highly significant improvement of acne scores but with no statistically significant difference in efficacy between the two groups. Incidence of clinical side effects, mainly dry skin and mucous membranes and gastro-intestinal upset, were significantly more common among patients receiving once daily dose. Both regimens caused mild but statistically significant rise of serum cholesterol, ALT and AST with more prominent rise in serum triglycerides especially with twice daily dose.

In conclusion: Oral isotretinoin is very effective in acne vulgaris treatment with no statistically significant difference in clinical efficacy between once or twice daily doses. Clinical side effects are more common among patients receiving single daily dose. Both regimens cause mild but statistically significant rise of serum cholesterol, ALT and AST with more rise in serum triglycerides especially with twice daily dose.

Biography
Hesham M Ahmad has completed his M.D. at the age of 25 years and Ph.D. at the age of 32 years from Al-Minia University, Al-Minia, Egypt. He did his postdoctoral studies at Thomas Jefferson University School of Medicine, Philadelphia, PA, USA. He is the clinical director of Cocoon Medical Centre, Al-Ain, Abu Dhabi, U.A.E., a Dermatology and Aesthetic centre. He is also an assistant professor at Department of Dermatology at Al-Minia University Hospital, Al-Minia, Egypt. He has published more than 20 papers in reputed journals.

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Notes:
Off label uses of vitamin-D treatment in dermatology

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Vitamin D is used in patients with psoriasis for years since it provides keratinocyte proliferation and differentiation regulation. It can also be used in skin diseases other than psoriasis. The aim of the study is to detect the off-label use of vitamin D in the skin diseases. All data about off label uses of vitamin D in treatment in dermatology were screened on medline database. Obtained studies were grouped according to types of diseases. 60 articles were included in the study. Strong evidences are found that the topical use of vitamin D in vitiligo as a part of combined therapy is effective. It is also showed that use of vitamin D as topical treatment has beneficial effect in several skin diseases such as morphea, eritema annulare centrifugum, prurigo nodularis, warts, ichthyosis; and as systemic treatment in diseases such as granuloma annulare. Vitamin D is not only effective in psoriasis, but also in the treatment of many skin diseases due to regulatory effect on keratinocytes and immunoregulatory properties. But still more comprehensive studies about off label use of vitamin D in dermatology is required.

Biography

Ufuk Kavuzlu received his medical degree from Mersin University in 2011, at the age of 24. Since 2013 he is an assistant doctor in Mersin University Hospital which his ongoing residency training in dermatology has started in.

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Notes:
Session Introduction

**Title:** Antimicrobial lipids at the skin surface  
Philip W Wertz, University of Iowa College of Dentistry, USA

**Title:** Medication-induced osteoporosis: What's the challenge in the field of dermatology?  
Farrokh Khosravi, Texas Institute of Dermatology, USA

**Title:** Evidence-based treatment in Behcet's diseases  
Umit Tursen, Mersin University School of Medicine, Turkey

**Title:** Onychomycosis: 1064-nm Nd: YAG q-switch laser treatment  
Hector Ricardo Ralvan Garcia, Hospital Dermatology Dermoquirurgica, Mexico

**Title:** Ultra sonographic evaluation of nerves in clinically suspected cases of pure neuritic leprosy- A study of 450 cases  
Mani Kumar Sharma, Sharma Skin Foundation, India

**Title:** The pathogenetic analysis of HPA axis regulated skin disorders- New inspiration on related drug development  
Jing Shang Silin, China Pharmaceutical University, PR China

**Title:** Chemical composition and biological activities of the essential oils of Ocimum basilicum purpureum, Ocimum basilicum thyrsiflora and Ocimum citrodorum  
Arpi Avetisyan, Nairian CJSC, Armenia

**Title:** Acne and treatment  
Sevil Alan, Akdeniz University, Turkey
Antimicrobial lipids at the skin surface

Philip W Wertz
University of Iowa College of Dentistry, USA

The skin surface represents our interface with the external environment, and as such, is our first line of defense against microbial colonization and infection. Lipids at the skin surface are thought to underlie at least part of an antimicrobial barrier. The skin surface is coated with sebaceous lipids, including lauric acid (C12:0) and sapienic acid (C16:1Δ6), both of which are uniquely potent antimicrobial agents. The free fatty acids are produced through the action of lipase(s) on sebaceous triglycerides. In addition, the stratum corneum contains antimicrobial free long-chain bases, sphingosine and dihydrosphingosine. The long-chain bases are thought to be produced through the action of ceramidases on ceramides near the skin surface. These antimicrobial lipids have been shown to kill a range of Gram-positive and Gram-negative bacteria, including Staphylococcus aureus that is resistant to both methicillin and mupirocin. Furthermore, some of these lipids have been found to act synergistically with ethanol and with the antimicrobial peptide LL37. In fact, sapienic acid, with or without a low concentration of ethanol, was more effective than mupirocin. These lipids are thought to be part of the innate immune system of the skin. The possibility exists that topical formulations of these lipids could be used prophylactically to prevent infections in susceptible individuals, such as the elderly or people with atopic dermatitis. Such formulations could also be used to treat active infections.

Biography
Philip W Wertz is a Professor in the Dows Institute, which is part of the University of Iowa College of Dentistry. He has more than 150 publications in referred journals and numerous book chapters. He serves on several editorial boards.

Notes:
Medication-induced osteoporosis: What’s the challenge in the field of dermatology?

Farrokh Khosravi and Reza F Ghohestani
Texas Institute of Dermatology, USA

Drug induced osteoporosis (DIO) represents about 20% of all cases affected by Osteoporosis. DIO is one of the most challenging health issues in the elderly patients affected by various skin diseases. Any attempt to prevent or treat DIO will significantly decrease patients morbidity and mortality. Novel drugs have been recently developed for prevention and/or treatment of DIO. New methods of detection, prevention and treatment of DIO will be discussed.

Biography
Farrokh Khosravi, M.D., has completed his fellowship of Rheumatology at the age of 38 years from Shiraz University. He is a part time Assistant Professor of Medicine. His field of interest is autoimmune skin disease and has published several papers in peer reviewed journals and served as a reviewer for Various Medical Journals.

Notes:
Evidence-based treatment in Behcet’s diseases

Ümit Türsen
Mersin University School of Medicine, Turkey

Behçet’s disease (BD) is a chronic, relapsing, systemic vasculitis of unknown etiology with the clinical features of mucocutaneous lesions, ocular, vascular, articular, gastrointestinal, urogenital, pulmonal, and neurologic involvement. Mucocutaneous lesions figure prominently in the presentation and diagnosis, and may be considered the hallmarks of BD. Therefore, their recognition may permit earlier diagnosis and treatment. Although, the treatment has become much more effective in recent years, BD is still associated with severe morbidity and considerable mortality. The main aim of the treatment should be the prevention of irreversible organ damage. Therefore, close monitoring, early and appropriate treatment is mandatory to reduce morbidity and mortality. Traditional and current treatments with topical, paraocular and systemic corticosteroids, colchicine, dapsone, cyclosporine, azathioprine, methotrexate, cyclophosphamide and chlorambucil are summarized and recent insights into the Clinical & Experimental Dermatology and effects of thalidomide, tacrolimus (FK-506), interferon-α, anti-TNF-α blocking monoclonal autoantibody (infliximab) and soluble TNF receptor (etanercept) are reviewed. The current state of knowledge regarding the therapeutic approaches for BD was reviewed and a stepwise, algorithmic approach was designed, mainly based on controlled studies and clinical experience in this field to provide a rational framework for selecting the appropriate therapy along the various treatment choices. Key clinical investigations with the status of ongoing clinical trials aimed at addressing the drug’s efficacy, surgical care, and studies that have raised the possibility of new therapeutic uses are also presented. The challenges posed by the drug’s teratogenicity and adverse effects are also considered, if present.

Biography

Ümit Tursen graduated from Gazi University Faculty of Medicine as Medical Doctor. He completed the residency period of Dermatology in Ankara University, Faculty of Medicine, Department of Dermatology between 1995-1999. He has been working in Mersin University, School of Medicine, Department of Dermatology since 2000. He is the Director of Mersin University, School of Medicine, Dermatology Department. He has published more than 80 papers in reputed journals, also books and serving as an editorial board member of repute. He won Behcet’s disease research award of “The scientific and technical research council of Turkey (TUBITAK)” in 1999.

Notes:
Laser treatment of onychomycosis is a quick and easy method without complications. Two hundred patients with a KOH(+) and onychoscopy(+), confirmed clinical diagnosis of onychomycosis were included in the present study. All of the patients were treated in a single session with a 1064-nm neodymium-doped yttrium-aluminum-garnet (Nd:YAG) q-switch laser. There was a 100% clinical response rate within the 18-month follow-up period with no side effects. This method is proposed as a novel and safe method for the treatment of ungual pathology.

Biography
Hector Ricardo Galvan Garcia has completed his MD at the age 25 years from Guadalajara University and postdoctoral studies from Institute of Dermatology of Jalisco. He is Director of Hospital Dermatology Dermoquirurgica in Jalisco, Mexico and he has published more than 20 papers in reputed journals and serving as an editorial board member of repute.

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Ultra sonographic evaluation of nerves in clinically suspected cases of pure neurite prosy- A study of 450 cases

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Objective: To study the role of ultrasonography (USG) of nerves as a screening and follow up imaging modality in clinically suspected cases of Pure Neuritic Leprosy (PNL).

Materials and Methods: Peripheral nerves of 450 clinically suspected cases of pure neuritic leprosy were evaluated by high resolution ultrasonography and compared with histologic findings. The cases were categorized according to the USG criterias- echogenicity of nerves- echogenic, hypoechoic and hyperechoic, thickness of nerves-normal and suspected nerves were compared.

Results: The analysis showed that 88% of hyphoechoic and thickened nerves showed AFB in histology. 38% of hypoechoic nerves without thickening showed AFB in histology. Nerve abscess was seen in 3% of cases. 40% of after treatment showed misted echogenicity.

Conclusion: Ultrasonography (USG) can be used as a screening and follow up imaging modality in suspected cases of Pure Neuritic Leprosy (PNL) in endemic areas as it is a non-invasive, easy to use, cheap, sensitive and highly reliable tool.

Biography
Mani Kumar Sharma did his MBBS from Kolkata University, India and completed his MD from Utkal University, India. He is presently the Director of Sharma Skin Foundation, Siliguri India, a premier skin foundation of eastern India. He is also the President of North Bengal Unit of Indian association of Dermatologists, Venereologists and Leprologists. He has been an original scientific research worker and has more than 20 publications in reputed journals to his credit. His works on mycoses and Pure Neuritic Leprosy in rural India are invaluable. mkdhakal@gmail.com

Notes:
The pathogenetic analysis of HPA axis regulated skin disorders- New inspiration on related drug development

Jing Shang Silin, Pang Qian Wang and Huali Wu
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Skin disease belongs to a complex disease, such as vitiligo, psoriasis, alopecia areata, atopic dermatitis, etc. Its specific mechanism is so far unclear. There is a great difficulty in treatment, enough to cause much pain to the patient. Skin is as the largest organ of the human body. Its existence is not just for the body barrier to the outside threatened homeostasis, and the skin and its accessories are widely innervated, the sensory nerve in the skin is directly upward to the cerebral cortex. The skin can be independent to synthetize and secret the stress hormones to maintain local and systemic homeostasis, and is also one of the biggest target organs of these hormones. Taken together, the skin is as the body's largest neuroendocrine and immune organs. Clinical survey found that the onset and development of many skin diseases were closely related to mental factors. A variety of skin diseases are contributed to the liability under psychological stress, such as urticant, atopic dermatitis, urticaria, psoriasis, acne, hair loss, etc. Mental stress can induce or aggravate the skin disorders. Psychological soothing and keeping a good state of mind can both help to alleviate these diseases. Now, for the pathogenesis analysis of these diseases, a preliminary study suggests that these skin diseases including psoriasis, vitiligo, alopecia areata, atopic dermatitis, etc., indeed have associations with mental stress. When the body responds to mental stress, the skin will present a corresponding change, such as hot flashes, sweating, etc. In addition to these visible external reactions, we also found that the skin showed significantly increased immune cells and mast cell degranulation. Large number of experimental and clinical studies proved that mental stress involved in the development and progression of many skin diseases. In response to mental stress, the body starts the hypothalamus - pituitary - adrenal (HPA) axis to combat stress conditions. Meanwhile, skin has its own HPA axis to respond to external stress and regulate skin function such as melanogenesis. Therefore, there is a problem that how HPA axis mediates the effect of mental stress on skin function, so as to promote the occurrence and development of skin diseases. To study the skin's response in face of mental stress and to explore the etiology and pathogenesis of skin diseases related to mental factors, it is of great significance and importance to the exploration of treatment targets and methods involved in skin disease.

This topic aims to study on the role of HPA axis in mental stress affecting skin functions, and investigate the mechanism of natural medicine HZCZ for regulating skin functions in a multi-target manner. This study provides a new idea of drug development for complex disease.

Biography

Jing Shang has completed her PhD at the age of 33 years from Free University of Berlin in Germany. She is the Deputy Director of Center for Drug Screening, China Pharmaceutical University and the secretary general of Applied Clinical & Experimental Dermatology Committee, Chinese Pharmaceutical Association. She has published more than 100 papers in reputed journals and serving as an editorial board member of repute.

Notes:
The aim of this study was to analyze the chemical composition of essential oils from three different species of basil, *O. basilicum purpureum* (Purple basil), *O. basilicum thyrsiflora* (Thai basil) and *O. citrodorum* (Lemon basil) and to test their biological activities. The three basil species were cultivated in the same field at the elevation of 1600 m above sea level in the Kotayk Region of Armenia. The essential oils were obtained by steam distillation in a Clevenger-type apparatus, a HP GC-MS setup was used to determine their chemical composition. According to the results, Purple basil essential oil contained 57.3% of methyl-chavicol (estragol); Thai basil oil had 68.0% of linalool and the main constituents of Lemon basil oil were nerol (23.0%) and citral (20.7%). The antioxidant activities of these essential oils were measured using DPPH assays. The highest antioxidant activity was demonstrated by Thai basil essential oil: IC50 value for it was equal to the standardized Grapefruit Seed Extract used as a control sample. The tyrosinase inhibition abilities of all three oils were also assessed. Obtained data indicate that basil essential oils can be useful natural agents for cosmetic applications and food dietary supplements. To test the possibilities for cosmetic application, several synergistic mixes containing essential oils from all three basil species were created and added to cosmetic cream bases. The oil mixes used in the creams were designed taking into account the dermal maximum values defined for their constituents. The creams were used for in vivo testing on volunteers.

**Biography**

Arpi Avetisyan is a Research Associate at Nairian CJSC, an Armenia-based all-natural cosmetics manufacturer. Her primary responsibility in the company is Technology Development for production and Scientific Research in the field of Herbal Cosmetics. She is interested in safe use of various herbs and essential oils to address diverse cosmetology issues. Before joining Nairian CJSC, she was a Researcher at the Institute of Chemical Physics of NAS of Republic of Armenia. She obtained her MS degree in Chemistry from Yerevan State University, Yerevan, Armenia.

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Acne and treatment
Sevil Alan
Akdeniz University, Turkey

Acne vulgaris is a chronic inflammatory skin disease that effects the pilosebaceous unit and is characterized with comedones, papules, pustules, nodules and occasionally with scars. The mainstay of acne therapy includes: topical retinoids, topical antibiotics, benzoyl peroxide (BP), and oral isotretinoin for severe cases. Current acne treatment regimens often require patients to use multiple medications, some of which may have side effects. Many of the new therapies discussed in this presentation.

Biography
Sevil Alan was born in Burdur, Turkey, in 1978. She received her medical degree from Ege Medical School in İzmir, Turkey and completed his dermatology residency at the Adana Numune Education and Research Hospital in Adana, Turkey. Today, Dr. Sevil Alan is a specialist of dermatology at the Akdeniz University School of Medicine, Antalya.

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Notes:
Workshop
(Day 2)
Drug eruptions have a wide spectrum of presentations, from Erythema and minimal urtication to the severe widespread mechano-bullous lesions as life threatening as third degree burns. Therefore, early Dx and prompt Rx essential. This action template will be used in several presentations of reactions.

Biography
Larry E Millikan trained at University of Michigan served on the Faculty University of Missouri and Tulane Founding Chair and has been Emeritus since 2006. He serves as Secretary General of the IACD, is on several editorial boards and is active in the EADV, AAD, IACD, ASDS, and ISDS.

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Psoriasis: Rethinking an ancient disease as biochemistry & immunology advances

This is a review of the developments in Biochemistry and Immunology that have led to a clearer understanding of the pathogenesis of psoriasis and the mechanism of actions of pivotal biologics which are used to treat this chronic immune mediated disease.

Biography
Erin Boh MD PhD received her PhD in Biochemistry from Tulane University Medical School in 1980, and her MD in 1985 from Tulane. After completion of her residency in Dermatology at UT Southwestern Medical School, she started on faculty at Tulane University Health Sciences Center and has been on faculty since 1990. She currently is Professor of Dermatology and is chairman of the Department of Dermatology. Dr Boh has authored numerous peer reviewed articles, chapters in text books. She has served on numerous committees for the AAD, WDS. She is past president of the Louisiana Dermatology Society. She is currently on the Medical Board for National Psoriasis Foundation and is Board of Directors elect for the AAD.
Phenotype related diagnosis and culprit drug(s) detection after drug eruptions. Validation of a new rapid preformed IL-6 release assay from patients T-lymphocytes by *in vivo* tests

Recently an International Consensus (ICON) on Drug Allergy has been published. This document includes skin and provocation tests in the diagnostic workup after drug eruptions but does not recommend *in vitro* assays because of lacking standardization. Humoral tests available on the market have low sensitivity; T-cell based cellular tests depend on cell cultures which last 3-5 days and has many requirements. Their results are often difficult to interpret for clinicians especially in relation of diverse phenotypic expression of drug induced skin injuries. Our aim was to overcome those problems by introducing a rapid reproducible assay based on preformed IL-6 release by the patient's mononuclear cells. Earlier, detection of the culprit drug induced rapid changes was done by morphometry on T-cell nuclei after short exposure to simple media and using 4-10 sequential molarity based drug dilutions. The present methods included ELISA-based measurement of rapid specific release of IL-6 from isolated mononuclear cells upon 20 minutes incubation with 0.15-0.5 µM (final) solutions of pure drugs (mol. mass 76-4000 Da) with either PHA-P or ConA as positive controls. ConA increased IL-6 release in concentration and time dependent manner. This indicated a preformed cellular pool for this cytokine. The test results have reflected both severity and surface extensions only with culprit drugs (n=43) of various Clinical & Experimental Dermatology and revealed a 85.4% sensitivity against *in vivo* challenges.

**Biography**

Balo-Banga (J. Matyas) has graduated from Semmelweis Medical University, Budapest. After residency and specialization in dermatology-venereology he was Assistant Professor in the Dept. of Experimental Oncology at Indiana University Purdue University, Indianapolis. After returning from the US he defended his PhD Thesis in Budapest and became specialist in laboratory medicine and in allergy-immunology. Up to 1989 he participated in basic and clinical research with the Austrian Centre Seibersdorf. In the 1990-s he was elected as Secretary General of the Hungarian Dermatologic Society. After 28 years at the University Dermatology Department he became Head of the Dermatology in the Military Hospital. He wrote or edited 20 books & book chapters and has ~40 papers cited in international medical databases.

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**Notes:**

Balo Banga J M

Hospital of the Hungarian Defense Forces, Hungary
Track 6: Diagnostic Techniques in Dermatology
Track 7: Dermatology: Therapies and Advances
Track 8: Dermatological Oncology

Session Introduction

Title: A new hope in preventing the progression and treating Alopecia areata
Aziz Ghahary, The University of British Columbia, Canada

Title: Understanding responses to therapy and rationale for combination strategies
Zachary A Cooper, University of Texas MD Anderson Cancer Center, USA

Title: Parathyroid hormone-related peptide and the hair cycle - A new target for developing alopecia therapies
Robert Gensure, Albert Einstein College of Medicine, USA

Title: Treatment with laser Nd: YAG q-switch vs IPL in superficial mycoses, deep and atypical mycobacteria
Hector Ricardo Ralvan Garcia, Hospital Dermatology Dermoquirurgica, Mexico

Title: Evaluation of serum level of B lymphocyte activating factor of the tumour necrosis factor family and peripheral blood CD19+ B lymphocytes in patients with generalized vitiligo
Yasmine Amr Issa, Alexandria University, Egypt

Title: Consequences of overcoming the skin barrier by low molecular cyclic and linear methyl siloxanes (silicones)
Krystyna Mojsiewicz-Pienkowska, Medical University of Gdansk, Poland

Title: Initiation of antiretroviral therapy in HIV-infected adults with skin complaints in northern Tanzania
Daudi Rajabu Mavura, Kilimanjaro Christian Medical University College, Tanzania

Title: A new model of in vitro fungal biofilms formed on human nail fragments allows reliable testing of laser and light therapy against onychomycosis
Claudia Sa Guimaraes, Federal University of Rio de Janeiro, Brazil

Title: Comprehensive consultation and visual diagnostic assessment of global skin tones
Pamela R Springer, Global Skin Solutions, LLC, USA
A new hope in preventing the progression and treating Alopecia areata

Aziz Ghahary
The University of British Columbia, Canada

Unfortunately, all treatment strategies currently used for Alopecia Areata (AA) are unsatisfactory. There are now supporting evidence that CD4+ and CD8+ T cells are involved in the pathogenesis of AA. Here, we targeted CD4+ and CD8+ by generating a L-tryptophan, an essential amino acid, deficient environment within which these cells can no longer become activated against hair follicle. To achieve this, we have successfully used IP injection of IDO, an enzyme that breaks down L-tryptophan to its metabolites, expressing cells in an AA mouse model and showed that none of AA affected mice developed AA as compared to 80% of control mice which developed extensive AA within 8-16 weeks after transplantation of an AA affected skin. The size of the lymph nodes in IDO treated mice was significantly smaller than that of non-IDO treated alopecia mice consistent with an absence of an inflammatory response. Importantly, this treatment significantly reduced the number of infiltrated immune cells (CD3+, CD4+ and CD8+ cells) at the site of AA affected skin as compared to that of controls. These findings indicate that IP injected IDO expressing dermal fibroblasts controls the inflammation and thereby reverses the progression of AA in this model. In conclusion, we have provided a supporting evidence that the progression of AA can be prevented by using a novel strategy in generating a tryptophan deficient environment within which active CD4+ and CD8+ T cells attacking hair follicles become dysfunctional and no longer are able to prevent the hair growth in our AA model.

Biography

Aziz Ghahary, PhD and Professor, the Director of the BC professional Firefighters “Burn and Wound Healing Research Group” has published more than 168 peer-reviewed articles some of which directly related to autoimmune diseases such as type I diabetes. He has been awarded more than 50 research grants from different local, national and international granting agencies. He is the leading investigator in identifying a serum 14-3-3 eta protein as a biomarker for early detection of RA and psoriatic RA and this test has now been launched by the Quest Diagnosis and Lifelab in US and Canada, respectively. Finally, he recently identified a small molecular with anti-scaring properties, which has now been approved by the Health Canada and the Vancouver General Hospital Ethic Committee to proceed to Phase 1 Clinical Trial.

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Notes:
Understanding responses to therapy and rationale for combination strategies

Zachary A Cooper
University of Texas MD Anderson Cancer Center, USA

There have been significant advances in melanoma therapy over the past several years with several molecularly targeted and immunotherapeutic agents recently FDA-approved for use in the treatment of patients with metastatic disease. However with these advances, we are posed with therapeutic dilemmas with regard to timing and sequence of therapy. Namely, there is significant debate as to whether to begin treatment with targeted therapy versus immunotherapy upfront and at which point to change treatment strategy. This is highly relevant as each of these treatments as mono-therapy have significant limitations. As a group, we have focused on better understanding response and resistance to therapy through longitudinal tissue and blood analyses in patients on targeted therapy and immunotherapy. We have worked with investigators worldwide to better understand response and resistance to therapy and have gained critical insights that have led to therapeutic inroads for patients with melanoma. This includes the use of combination strategies such as adding immune checkpoint blockade to a backbone of molecularly targeted therapy. Clinical trials combining these strategies are currently underway and it is becoming increasingly apparent that complexities exist with regard to these combinations. A better understanding of mechanisms of response to combination strategies through translational research is critical and is best performed on longitudinal patient samples during the course of therapy which may inform (and be informed by) parallel murine studies. Ultimately, ideal combination approaches will be built on a deep understanding of molecular and immune effects of each therapy in isolation as well as in combination.

Biography

Zachary A Cooper has completed his PhD from University of Maryland, Baltimore and Postdoctoral studies from Brown University and Harvard Medical School. He joined the faculty at MD Anderson Cancer Center in 2013 with a dual appointment in the Departments of Surgical Oncology and Genomic Medicine. He is a Translational Scientist whose research focuses on the interface of the immune system and targeted therapy in melanoma. He has published more than 30 manuscripts in reputed journals including Nature, Nature Genetics, Cancer Discovery, Journal of Clinical Investigations, Science Signaling, Cancer Research and Clinical Cancer Research among others.

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Notes:
Parathyroid hormone-related peptide and the hair cycle: A new target for developing alopecia therapies

Robert Gensure
Albert Einstein College of Medicine, USA

Alopecia is a very common condition with a variety of causes including androgenic stimulation (male-pattern hair loss, polycystic ovarian syndrome), drug-induced (chemotherapy alopecia) and autoimmune disorders (alopecia areata). Hair loss can cause psychological stress and the lack of effective therapies can cause patients to pursue off-label use of potentially hazardous treatments. Parathyroid hormone-related peptide (PTHrP) is a hair cycle regulator which provides a promising target for development of alopecia therapies. While early studies focused on using PTHrP antagonists to prolong the anagen phase, more recent studies suggest that PTHrP agonists can initiate the anagen phase by increasing levels of beta-catenin in hair follicles. Skin targeted PTHrP analogs have been shown to increase hair growth in animal models of chemotherapy alopecia and alopecia areata. The treatments result in increased number of hair follicles and resolve the dystrophic changes seen in these conditions. There is an associated increase in beta-catenin levels which suggests that PTHrP agonists act through activation of the Wnt signaling pathway. This new finding introduces a promising target for drug development for many causes of alopecia.

Biography

Robert Gensure completed his MD and PhD at Tulane University School of Medicine and Postdoctoral training at Massachusetts General Hospital. He is currently an Associate Professor at Albert Einstein College of Medicine and an attending Physician at the Children’s Hospital at Montefiore. He has published more than 40 papers, review articles and book chapters.

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Notes:
In this study the effectiveness of laser therapy demonstrated Nd: YAG (1064nm / 532nm) and pulse intensive light on the \textit{in vitro} treatment of superficial mycoses, deep and atypical mycobacteria. Was performed in Petridishes with agar sabouraud cultures of \textit{t.rubrum}, \textit{m.canis}, \textit{t.tounsurans}, \textit{t.mentagrophytes} as well and deeper fungi, \textit{f.prodrosoi}, \textit{s.schenki} and \textit{c.carrioni}, also sapphire glass tubes with culture medium lowenstein Jensen for \textit{m. abscessus}., all these luminicas exposing them to these two therapies. Finding in all cases a favorable response in inivicion growth of colonies, varying according to set this type of light, intensity, time and mechanics of it. Where by this reopening a new horizon in the dermatological therapeutics of the future.

\textbf{Biography}

Hector Ricardo Galvan Garcia has completed his MD at the age of 25 years from Guadalajara University and postdoctoral studies from Institute of Dermatology of Jalisco. He is director of Hospital Dermatology Dermoquirurgica in Jalisco, Mexico., and he has published more 20 papers in reputed journals and serving as an editorial board member of repute.
Evaluation of serum level of B lymphocyte activating factor of the tumor necrosis factor family and peripheral blood CD19+ B-lymphocytes in patients with generalized vitiligo

Y A Issa, A A Eid, E M Hassan, H M Donia and R M A Abou El Seoud
Alexandria University, Egypt

Background: There is a strong body of evidence supporting an autoimmune basis for generalized vitiligo. B lymphocyte activating factor of the tumor necrosis factor family (BAFF) is known to be involved in the pathogenesis and progression of autoimmune diseases.

Objective: To evaluate serum levels of BAFF and peripheral blood CD19+ B-lymphocytes in patients with generalized vitiligo and to explore the effect of treatment with narrow band ultraviolet B (NB-UVB) on their levels.

Methods: Serum BAFF and peripheral blood CD19+ B lymphocytes were measured in 30 patients with generalized vitiligo and 30 healthy control subjects. Patients received NB-UVB sessions for three months and follow up samples were then collected.

Results: Serum BAFF and peripheral blood CD19+ B-lymphocytes were significantly higher in patients than in control subjects (p<0.001). No significant correlation was detected between serum BAFF and CD19+ B-lymphocytes. In addition, correlations between serum BAFF or CD19+ B-lymphocytes disease duration, activity and severity were non-significant. After treatment with NB-UVB, significant reduction in the vitiligo area severity index (VASI) score was detected (p=0.02) but serum BAFF levels and Peripheral blood CD19+ B lymphocytes did not show significant change.

Conclusion: Elevation in serum BAFF levels and CD19+ B-lymphocytes in generalized vitiligo patients possibly provides further support to the autoimmune hypothesis of the disease and to the possible role played by B-lymphocytes in the pathogenesis of the disease.

Biography
Yasmine Issa has completed her MBSc at the age of 24 from Alexandria Faculty of Medicine, then completed her MD and PhD. In 2008-2009, Yasmine was a research fellow in Leipzig University Clinic of Dermatology, Allergology and Venerology. Currently, she is a lecturer in Medical Biochemistry and Molecular Biology department, Alexandria Faculty of Medicine, where she resumes her postdoctoral studies. She is a researcher in nanomedicine lab, genomics center, and Egybiotech, a leading research incubator in Egypt. She is a reviewer in the journal “Andrologia”. She has publications and posters in the field of andrology, cardiovascular diseases and nanomedicine. We kindly request you to attach your photograph as it is required for updation in our scientific program.

Notes:
Consequences of overcoming the skin barrier by low molecular cyclic and linear methyl siloxanes (silicones)

Krystyna Mojsiewicz Pienkowska, Katarzyna Szymkowska, Dominika Glamowska, Krzysztof Cal, Zbigniew Jankowski, Marzena Jamrógiwicz, Rafał Bartoszewski, Sylwia Bartoszewska and Michał Pikuła
Medical University of Gdańsk, Poland

Skin diseases and dermatology problems depend on many factors. One of the reasons could be the influence of various substances presence in medical products on skin, personal care products or cosmetics which are not indifferent for skin. The reason can be changing of the skin barrier by active pharmaceutical ingredients API or excipients. A new interdisciplinary approach is presented to demonstrate possibility of penetration of the low molecular linear and cyclic methyl siloxanes (silicones) to human stratum corneum and permeation to the deeper layers of the skin (epidermis and dermis). On the basis of the fluorescence microscope as well as ATR FT-IR spectroscopy both the penetration and permeation to this skin layer as well as impact on the damage of corneocytes of the stratum corneum was observed. Presented results show that the phenomenon alteration the skin barrier was due to the damage of stratum corneum structure in conjunction with distinct disturbances in the lipid structure of the mortar lipid of the stratum corneum. It is noticed that cyclic and linear methyl siloxanes are able to overcome the barrier of the skin due to the interaction between silicones and SC lipids bilayers. Obtained results concerning the cytotoxic effects for immortal keratinocytes cell line HaCaT are also presented. These conclusions are very important, particularly in dermatology and toxicology, to the safety assessment of using these compounds. Low molecular linear and cyclic methyl siloxanes are commonly used as excipients in medical products for skin (e.g. Rozex Metronidazolum) and personal care products (e.g. Penaten Baby Cream or Body Lotion Garnier). It causes the significant human exposure to this group of compounds. They can be applied both by adults, children and infants. It must be noticed that so far, the transdermal route has not been described in the literature as a possible route of penetration and permeation by the linear and cyclic methyl siloxanes.

Biography
Krystyna Mojsiewicz-Pienkowska PhD, D.Sc. is an Assistant Professor in the Department of Physical Chemistry at the Medical University of Gdańsk, Faculty of Pharmacy with Subfaculty of Laboratory Medicine, Gdańsk, Poland. She is also an expert in the National Centre for Research and Development. She has published more than 25 papers in reputed journals. Krystyna Mojsiewicz-Pienkowska is an active reviewer for the scientific pharmaceutical and chemical journals. Currently scientific and research activity is related with: studies of the penetration and permeation of silicones and drugs through the human skin; development of analytical methods for drug analysis; silicones application in pharmacy, medicine and cosmetic products.

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Notes:
Abnormal skin findings are identified in over 90% of human immunodeficiency virus (HIV)-infected persons globally. A prospective cohort study of HIV-infected subjects presenting with skin complaints in northern Tanzania was undertaken. Consecutive HIV-infected subjects presenting with skin complaints, who met criteria for ART initiation, were recruited at a Tanzanian Regional Dermatology Training Center. A single dermatologist evaluated all subjects; baseline skin biopsies were performed, and CD4+ cell counts and plasma HIV RNA levels were measured. All subjects received a fixed – dose combination of stavudine, lamivudine, and nevirapine. A total of 100 subjects were enrolled; 86 subjects completed six months of follow-up. Median baseline CD4+ cell counts and plasma HIV RNA levels were 120 cells/ul and 5.2 log_{10} copies/ml. The most common dermatological condition was papular pruritic eruption (47%). The median baseline score on the burn scale was 38%. After six months, 10 subjects had achieved the complete resolution of the skin abnormalities. In those without complete resolution, the median Burn Scale score improved to 7%. Five patients developed new eruptions by month 3, which in two cases were attributed to drug reactions. In the 86 subjects remaining on ART after the six months, the median CD4+ cell count had increased to 474 cells/ul and plasma HIV RNA levels were <400 copies/ml in 85 (99%) subjects. Patients with HIV infection with skin complaints experienced marked clinical improvements following ART initiation.

Biography

Daudi Rajabu Mavura is the current principal of the Regional dermatology training center (RDTC) in Moshi, Tanzania where he also lectures. The RDTC is a tertiary training institute of both The Tumaini University and Muhimbili University of Health sciences. Dr. Mavura holds a Medical Degree from the University of Carlos J. Finlay in Cuba and a Masters of Medicine degree from the Tumaini University. He has subspecialised in dermatosurgery from UKT-Germany and the Univesida de alcala de Henare in Spain. He has published and co-authored several papers mostly in tropical dermatology. He is fluent in English, Spanish and his native Kiswahili.

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Notes:
A new model of *in vitro* fungal biofilms formed on human nail fragments allows reliable testing of laser and light therapy against onychomycosis

Claudia Maria Duarte de Sá Guimaraes, Taissa Vieira Machado Vila and Sonia Rosental
Federal University of Rio de Janeiro, Brazil

Onychomycosis represent approximately 50% of all nail diseases worldwide. In warmer and more humid countries like Brazil, the incidence of onychomycosis caused by non-dermatophyte molds (NDM, including *Fusarium spp.* or yeasts (including *Candida albicans*) has been increasing. Traditional antifungal treatments used for the dermatophyte-borne disease are less effective against onychomycosis caused by NDM. Although some laser and light treatments have demonstrated clinical efficacy against onychomycosis, their FDA-approval as ‘first line’ therapy is pending, partly due to the lack of well-demonstrated fungicidal activity in a reliable *in vitro* model. Here, we describe a reliable new *in vitro* model to determine the fungicidal activity of laser and light therapy against onychomycosis caused by *Fusarium oxysporum* and *C. albicans*. Biofilms formed *in vitro* on sterile human nail fragments were treated with 1064-nm neodymium-doped yttrium aluminum garnet laser (Nd:YAG), 420 nm intense pulsed light (IPL 420), IPL 420 followed by Nd:YAG, or near infrared light (NIR 700 - 1400 nm). Light and laser antibiofilm effects were evaluated using cell viability assay and scanning electron microscopy (SEM). All treatments were highly effective against *C. albicans* and *F. oxysporum* biofilms, resulting in decreases in cell viability of 45-60% for *C. albicans* and 92-100% for *F. oxysporum*. The model described here yielded fungicidal activities that matched more closely those observed in the clinic, when compared to published *in vitro* models for laser and light therapy. Thus, our model might represent an important tool for the initial testing, validation and ‘fine-tuning’ of laser and light therapy against onychomycosis.

Biography
Claudia Sa Guimaraes has completed his graduation in Medicine at the age 24 years from Souza Marques School Medicine and specialization in dermatology at Rio de Janeiro Santa Casa de Misericordia. She has published 3 books, more than 4 chapter on dermatology text books, three articles in reputed journals and worked at Brazilian journal of Medicine 14 years. Since 2011 have been collaborated with Federal University of Rio de Janeiro at Laboratory of Celular Biology of Fungus where Taissa Villa with Sonia Rozental supervision create a new model of *in vitro* fungal biofilms emerged from the interest on the laser treatment of onychomycosis in your doctor's office.

Notes:
Comprehensive consultation and visual diagnostic assessment of global skin tones

Pamela R Springer
Global Skin Solutions, LLC, USA

The goal of this activity is for health care and wellness providers to develop a greater understanding of the importance of assessing ethnic and cultural factors when performing skin assessments, developing skin treatment plans or consulting with individuals regarding basic or advanced skin care treatments. Current data suggests that ethically/racially diverse patients may be identified and diagnosed with skin cancer at later stages than other groups. The heart of the course is the development of a personal skin profile based on observation and quantitative methods. Consultation is the key to a truly comprehensive skin assessment and in this way supports not only skin health but the early identification of potential skin cancer risks.

Biography
Pamela Springer has over 20 years of experience working with African American, Asian and Hispanic skins. She has consulted with medical personnel and their support staff training on the similarities and differences of each ethnic group. She has written, Natural Radiance: A Guide to Ethnic Skin Care, is a book reviewer for Milady’s Publishing and a Subject Matter Expert for the National Council of State Boards of Cosmetology, Inc (NMC). She was the first aesthetician to serve on the Arizona Board of Cosmetology. Contributing to industry publications has led her to become a sought-after speaker for the aesthetics, cosmetology and medical practitioners.

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Notes:
Workshop
(Day 2)
Stress-relaxation is a well-established mechanism for laboratory skin stretching with limited clinical application in conventional suturing techniques due to the inherent, concomitant induction of ischemia, necrosis, and subsequent suture failure. Skin defects that cannot be primarily closed are a common difficulty during reconstructive surgery. The TopClosure® tension-relief system (TRS) is a novel device for wound closure and secure attaching to the skin through a wide area of attachment in an adjustable manner enabling primary closure of medium to large skin defects. We present demonstrative cases requiring resection of large to huge tumors customarily requiring closure by skin graft or flaps. TRS was applied during surgery serving as a tension-relief platform for tension sutures to enable primary skin-defect closure by cycling of stress-relaxation and following surgery as a skin-secure system until complete wound closure. All skin defects were manipulated by the TRS through stress-relaxation without undermining of skin enabling primary skin closure and eliminating the need for skin grafts and flaps. Immediate wound closure ranged 26-135 min. Complications were minimal and donor site morbidity was eliminated. Surgical time, hospital stay and costs were reduced and wound aesthetics were improved. TRS is novel technology that enables the utilization of the viscoelastic properties of the skin to an extreme level extending the limits of primary wound closure by the stress-relaxation principle. This is achieved via simple device application that aid immediate primary wound closure and downgrade the complexity of surgical procedures for a wide range of applications on a global scale.

Biography
Moris Topaz has completed his MD and PhD at the Ben Gurion University, Israel and Postdoctoral Fellowship at the Eastern Virginia Graduate School of Medicine, USA. He is the Director of the Plastic Surgery Unit, the Hillel Yaffe Medical Center and was affiliated for years to the Department of Chemistry, Bar Ilan University, Israel. He has developed innovative devices and technologies to expedite wound healing. He has written and published articles in a variety of medical journals and has actively participated in numerous scientific meetings globally. Currently he is leading a National Project in Wound Healing in China as a Visiting Foreign Expert Professor.

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Special Session
(Day 2)
Targeting IgE in atopic dermatitis: Immunoadsorption and omalizumab as novel treatment approach

Patients severely affected by atopic dermatitis (AD) commonly have highly elevated serum IgE levels. Until today, the role of IgE in the pathogenesis of AD remains a highly controversial issue. To evaluate the role of IgE in AD we developed an anti-IgE-treatment approach by combining immunoadsorption (IA) and anti-IgE antibody omalizumab (OMZ) for maximum possible IgE serum level reduction in patients with severe, therapy-refractory AD and elevated IgE levels. First patients treated by IA and OMZ all showed a significant reduction of IgE levels after IA and a further dropping of biological active IgE during treatment with omalizumab. A reverse trend was observed after stopping treatment during the follow-up period. Parallel, a clear improvement of AD was seen during the treatment period followed by an aggravation during observational follow-up. Combining IA and OMZ in atopic dermatitis thus seems suitable to effectively reduce elevated serum IgE levels and to improve clinical symptoms of severe refractory AE without other systemic treatments. However, further studies with larger patient numbers are needed to strengthen our conclusion based on the first findings of our novel and promising anti-IgE treatment approach in severe atopic dermatitis.

Biography

Alexander Zink is a Dermatologist and Public Health Specialist at the Department of Dermatology and Allergy at Technische Universität München in Munich, Germany. His research interests include public health and prevention strategies in dermatology and new treatment approaches in dermatologic diseases with main focus on immunoadsorption. He has published multiple peer-reviewed articles in highly ranked international journals and served as a specialist for immunoadsorption on several past international meetings.

Notes:
Scientific Tracks & Abstracts (Day 3)
### Track 9: Skin Infections and Prevention

**Session Chair**
Alexander Zink  
Technische Universitaet Muenchen, Germany

**Session Co-chair**
Zahide Eris Eken  
Istanbul Bilim University School of Medicine, Turkey

#### Session Introduction

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Track 10: Clinical and Medical Dermatology
Transepidermal administration of tranexamic acid for treating melasma- A randomised double blind placebo controlled study

Hemmady K, Udare S and Jerajani H.R
Mahatma Gandhi Mission Institute of Health Sciences, India

Introduction: Melasma is an acquired condition that presents as tan to brown hyperpigmented macules which coalesce to form patches on the forehead, cheeks, nose and chin resulting in cosmetic concern to patients. A clinical trial of intradermal injections of tranexamic acid for melasma proved to be efficacious. We postulate the use of microneedling system, like dermaroller TM, to increase efficacy of tranexamic acid delivery by creating micro-channels may be utilised for treating melasma.

Aims and Objectives:

- To study the safety and efficacy of transepidermal administration of tranexamic acid 100mg/ml in treatment of melasma.
- To compare MASI scores, evaluated by a blinded investigator, at pre-treatment, week 2, week 4, and week 8.
- To evaluate physician global assessment, by a blinded investigator, at pre-treatment, week 2, week 4, week 8.
- To compare patient global assessment at pre-treatment, week 2, week 4 and week 8.
- To report any adverse effects of the procedure and treatment.

Material and Methods: Twenty patients, who fulfilled the inclusion criteria, were recruited for the split face prospective trial lasting 8 weeks. The test and control sides of the face of all subjects were randomised and one side received tranexamic acid 100mg/ml while the other side received placebo (normal saline solution), after creating micro-channels with dermaroller. The procedure was repeated at weekly intervals. All patients were photographed prior to starting the procedure (base line photographs) and then at weekly intervals prior to the procedure. MASI scoring was evaluated at each follow up prior to commencing the procedure.

Result: A total of 20 patients were enrolled for the study. There were no drop outs in the study and no adverse effects to the treatment modality were reported. There was a decreasing trend in the MASI results, which was evaluated by the blinded investigator, as the treatment continued on the test site as compared to placebo which remained static.

The physician global assessment scores showed no significance in the placebo site however there was significant improvement in the test sites.

The global assessment scores of the patients showed an improvement (p-value 0.001) in the test site as compared to the placebo sites which showed no significant trend (p-value more than 0.05).

Conclusion: Transepidermal delivery of 100mg/ml tranexamic acid with microneedling is a new and promising procedure to treat melasma.

Biography
Karishma Hemmady has completed her MD in Dermatology from MGM Institute of Health Science from Mumbai, India in 2014. She has also completed her Diploma in practical Dermatology from Cardiff University, UK in 2013. She is a Specialist Registrar in the Department of Dermatology at MGM Hospital, and a board member and consulting dermatologist at Ultra Derm Clinic, Pune, Maharashtra, India. Being research oriented, she has presented and published more than 10 papers in reputed journals and conferences.

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Introduction of a novel therapeutic option for atrophic acne scars: Serum injection therapy

Nooshin Bagherani
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Introduction & objective: Acne scars are extremely bothersome to patients and often challenging to treat. Regarding texture, they are divided into the scars with normal texture and the scars with atrophic texture. The acne scars with atrophic texture consist of ice pick, boxcar and rolled scars. Topical, physical, surgical, and light modalities, alone or in combination have been administered in the treatment of acne scars with variable results. Herein, for the first time I introduced serum injection therapy as a novel effective therapeutic option for the atrophic acne scars.

Material & Method: In this study, the patients with atrophic acne scars were selected among the patients had referred to my private dermatology office. After describing the process of the study, a written consent was acquired from them. I administered 0.9% sodium chloride serum in this study. After local anesthesia with lidocaine, the serum was injected intra- and sub-dermally in the regions of acne scars and skin pores. The amount of serum for injection was determined based on the severity of scars, so that it over-corrected the scars and widespread to the neighboring regions. In every session, before the procedure, photographs were taken from the patients. This process was done weekly for 5 weeks and topical alpha hydroxy acid-containing agents were prescribed beside this procedure. In every session, I objectively and subjectively assessed the results of treatment regarding the type of acne scar. In this study, for evaluating the response I used a visual score including: scores 1-3 as poor response, 4-6 as moderate response, 7-9 as good response, and 10-12 as significant response. The subjective evaluation was acquired by questioning about the general success of treatment from the patients. For the objective evaluation, the photographs were observed. This observation included the assessment of response according to the type of acne scar. For every case, the objective and subjective scores in every session and the mean of these scores after the last session were considered for assessment of the response. At the end, the data was analyzed by the SPSS software.

Result: Among the 12 cases studied, 10 (83.3%) cases were female and 2 (16.7%) cases were male. The minimum and maximum ages of patients were 18 and 56 years, respectively. Among the subjects, 6 (50%) and 1 (8.3%) patients had unsuccessfully undergone laser therapy and microdermabrasion for treating their acne scars, respectively. Isotretinoin was simultaneously administered in 4 (33.3%) patients with the active acne. The ice pick, boxcar and rolled scars, and large pores were seen in 4 (33.3%), 10 (83.3%), 8 (66.7%) and 6 (50%) of patients, respectively. The patients had Fitzpatrick's skin types of III and IV. After the first and fifth sessions, the mean subjective response scores were 7.1±1.2 and 10.2±1.08, respectively. In the objective assessment, the mean score responses were 6.7±1.5, 7.2±2.02, 7.0±1.8, and 7.2±1.01 for the ice pick, boxcar, rolled scars and pores, respectively. After the fifth session, these scores were 10.0±0.9, 10.9±1.01, 10.4±1.3, and 10.3±1.3, respectively. The response was better in the acne patients under oral isotretino in therapy in comparison with other cases, but it was not statistically significant. No statistically significant difference in the response was reported regarding the age, gender, skin type, and severity of acne scar. The patients reported skin lightening and tightening, decreasing of wrinkles and eminent cheeks as side profits of this procedure. Mild ecchymosis was the only side effect was seen in about one third of patients.

Conclusion: My study revealed that the response to serum therapy was significant in the large pores and all types of the atrophic acne scars. In comparison with the severe acne scar, the patients with mild and moderate scars showed better responses. This study showed that the serum injection therapy can be an effective therapeutic option for the atrophic acne scars with no significant side effects. In addition, my study revealed that this procedure can successfully be used in the treatment of patients suffering from the large skin pores.

Biography

Nooshin Bagherani completed her General Medicine at Arak University of Medical Sciences followed by Training in Dermatology from Jundishapour University of Medical Sciences. She is also Bachelor of Law and student of Oil Engineering. She is one of the Founders of the Association of the Students and Graduates of Markazi Province in Arak. Now she is the Founder and Editor of "The World’s Greatest Dermatology Atlas". She has authored more than 20 publications in peer-reviewed journals, one textbook and one chapter in another book.
Mesotherapy and PRP procedures in hair loss

Zahide Eris Ekoen
Istanbul Bilim University School of Medicine, Turkey

Hair loss is a frequently seen embarrassing problem faced by people of all age groups and ethnicity. Factors that cause hair loss are genetic, environmental, pathological and psychological. Various treatment and cosmetic procedures gaining importance in the treatment of hair loss over time. Mesotherapy and PRP are also procedures that used in hair loss. There are a few studies about these techniques and their efficacy in relation with hair loss therapy. But these procedures have received a lot of publicity in the media and internet about its role in hair loss and androgenetic alopecia. Mesotherapy and PRP injections are made directly into the skin with mesogun or by hand once in 2-4 weeks. In hair loss some physicians use both of these procedures. Mesotherapy and PRP techniques and their uses in hair loss discussed in this presentation.

Biography
Zahide Eris Eken was born in Aksaray, Turkey. She graduated from Istanbul University Cerrahpasa Faculty of Medicine as Medical Doctor. She completed her residency period of Dermatology in Istanbul Bezmialem Vakif University, Faculty of Medicine, and Department of Dermatology. She is working in Istanbul Bilim University, Faculty of Medicine, Sisli Florence Nightingale Hospital, and Department of Dermatology as a Assistant Professor.

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Notes:
Experience with ivermectin in treatment of scabies and pediculosis capitis

Hesham M Ahmad
Al-Minia University, Egypt

Many medications are available for treatment of scabies and pediculosis capitis including ivermectin. We compared the efficacy and safety of topical versus oral ivermectin in treatment of scabies and pediculosis capitis. A total of 62 patients with uncomplicated scabies and 62 patients with head lice infestation were included. Each group was further subdivided into: Group I received single topical application of 1% ivermectin and Group II received single dose of oral ivermectin. Treatment was repeated after one week for non responders and patients were evaluated weekly for 4 weeks. The clinical responses as well as side effects were reported weekly. The results of this study show that both topical and oral ivermectin demonstrate high efficacy and tolerability in treatment of scabies and pediculosis capitis. However, a single treatment of pediculosis capitis with topical ivermectin provides significantly higher cure of infestation and faster relief of pruritus than oral ivermectin. In addition, whether topical or oral ivermectin is used to treat scabies or head lice, a second dose is required in some cases to ensure complete eradication.

Biography

Hesham M Ahmad has completed his M.D. at the age of 25 years and Ph.D. at the age of 32 years from Minia University, Minia, Egypt. He did his postdoctoral studies at Thomas Jefferson University School of Medicine, Philadelphia, PA, USA. He is the clinical director of Cocoon Medical Centre, Al-Ain, Abu Dhabi, U.A.E., a Dermatology and Aesthetic centre. He is also an assistant professor at Department of Dermatology at Minia University Hospital, Minia, Egypt. He has published more than 20 papers in reputed journals.

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Notes:
Young Researchers Forum
Do sunscreens protect us?

Xinyi Du and Douglas Maslin
University of Cambridge, UK

Sunlight stimulates a multitude of important biological effects on skin causing amongst other pathological changes, photocarcinogenesis. Sunscreens are designed to provide protection against these harmful properties of ultraviolet radiation and public health campaigns have been employed to encourage their use. Despite this, there has been a continued rise in the incidence and mortality of the most harmful skin cancer, malignant melanoma. Although public health campaigns and mathematical models suggest sunscreen use would reduce incidence of all skin cancers including melanoma, research so far has not provided clear-cut evidence that this is true. One randomized controlled trial found the daily use of sunscreen over 4½ years significantly reduced the incidence of squamous cell carcinoma but not of basal cell carcinoma. More recent studies have had similar results; the risk of squamous cell carcinoma is decreased but the results for basal cell carcinoma are equivocal. Furthermore, some early research on melanoma has even suggested controversially that the application of sunscreen may even increase the risk of melanoma. However, the presence of confounding factors such as the potential inappropriate application of sunscreen and increased time of UV exposure in sunscreen users are not fully accounted for within these studies. We will explore the available evidence on both the beneficial and harmful effects of sunscreen use with practical advice on how we might advise our patients to best protect themselves from photocarcinogenesis.

Biography

Xinyi Du has graduated from Medicine at the University of Cambridge, UK in 2012. She is completing her Training in General Internal Medicine in London and is currently based at the Royal Marsden Hospital. She has an interest in public health and medical education and is additionally completing a Masters in Clinical Education at King’s College, London.

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Notes:
The immunomodulatory and prognostic role of indoleamine-2,3-dioxygenase-1 in cutaneous T-cell lymphomas

Pilvi Maliniemi1, Liisa Väkevä1, Tuomas Lipsanen1, Katja Dettmer2, Peter Oefner2, Marshall E. Kadin3, and Annamari Ranki1

1University of Helsinki and Helsinki University Central Hospital, Finland
2University of Regensburg, Germany
3Boston University School of Medicine, USA

Indoleamine-2,3-deoxygenase (IDO-1), catabolizing tryptophan (Trp) to kynurenine (Kyn), causes an immunosuppressive microenvironment in many neoplasias. In this study we identify the IDO-expressing cell subtypes in cutaneous T-cell lymphoma (CTCL) and determine the significance of serum Kyn/Trp catabolite levels. IDO-1 mRNA and protein expression was studied in 68 FFPE skin samples of mycosis fungoides (MF), lymphomatoid papulosis (LyP), lichen ruber planus (LRP), and subcutaneous panniculitic-like T cell lymphoma (SPTL), and in three CTCL cell lines. For co-expression, anti-CD33 (myeloid-derived suppressor cells, MDSC) and anti-CD163 (tumor-associated macrophages, TAM) antibodies were used. Levels of 14 Trp metabolites were measured in 69 patient and healthy control sera by liquid chromatography–tandem mass spectrometry (LC-MS/MS). The relative expression of IDO-1 mRNA was markedly elevated in MF and LyP samples compared to LRP and also in the MF-derived cell line MyLa compared to the CD30+ CTCL lines Mac-1 and Mac-2A. Interestingly, IDO was co-expressed by CD33+ MDSCs in MF and in LyP and by the CD163+ TAMS in SPTL. The increase of IDO also associated with the elevated level of Treg cells in LyP as 50% of the cases studied showed a moderate or strong FoxP3 expression. Serum Kyn/Trp ratios showed significant increase in MF (p<0.05) compared with those of healthy controls and correlated with MF activity. We show that IDO is produced by the MF cell line MyLa and by CD33+ MDSCs in MF and in LyP but instead by CD163+ TAMS in SPTL. FoxP3+ Tregs, abundant in LyP, may contribute to the indolent clinical behavior. Serum Kyn/Trp ratio in MF associates to a progressive disease behavior and may be a useful clinical indicator.

Biography

Pilvi Maliniemi is currently a graduate student, who will be completing her PhD this year 2015 from the Medical Faculty of Helsinki University. She has already published eight (8) papers in reputed journals in the field of Mitochondrial Diseases and Molecular Oncology of Cutaneous T Cell Lymphomas.

Notes:
Smash grafting in stable vitiligo: A case study of 30 cases in a tertiary care hospital in north India

Manjit Kaur
Baba Farid University of Health Sciences, India

Vitiligo is an acquired, progressive depigmentation disorder of the skin and or mucous membranes of great cosmetic importance. Many new therapeutic options for vitiligo (both medical and surgical) have become available over the last decade. One among them is the smashed skin grafting or smash grafting which is a modification of split-thickness grafting. In this procedure, the graft undergoes smashing before being applied to the recipient site. Although it is a simple and effective procedure but very few people are doing it either due to lack of awareness or due to lack of published data. Objective of this study was to evaluate the effectiveness and safety of smash grafting in cases of stable vitiligo. Smash grafting was done in thirty cases of localized, stable, recalcitrant vitiligo in the present study. Patients were divided into group A (PUVA was given postoperatively) and group B (only sunlight exposure was given post operatively) and were followed up at four, eight, twelve weeks to assess repigmentation with the surrounding skin. In all 30 cases, repigmentation was observed from 3 weeks onwards and continued to increase on subsequent follow-ups. 76.66% of patients achieved more than 50% repigmentation at 12 weeks. Although number of study cases was small and also the follow up period was short (only 12 weeks), Smash grafting was found to be a simple, easy to learn and cost effective one stage procedure with gratifying results for extensive areas of vitiligo with no surgical complications as compared to other surgical methods.

Biography

Manjit Kaur has completed her MBBS from Baba Farid University of Health Sciences, Faridkot, India in 2006 and Masters in Dermatology & STDs from the same University at the age of 27 years. She stood first in Postgraduate University Examination. She has worked as a Senior Consultant at Kaya Skin Clinic for two years and as a Senior Resident at Government Medical College, Chandigarh for three years. She is a life member of IADVL, CSI and ACSI. She has presented papers in Award Paper session, Young Dermatologist Forum, free papers and Posters in national and regional dermatology conferences.

Notes:
Therapeutic efficacy of intralesional tuberculin in the treatment of *Verruca vulgaris*

Pragati Gogia  
Government Medical College and Hospital, India

*Verruca vulgaris* or wart is a notorious dermatological problem encountered in day to day practice. Warts don’t spare any age group but their peak occurrence is seen in children and early adulthood. Once the infection is established it can remain latent or clinically appears in form of verrucous plaques which progress, spread or regress spontaneously. Spontaneous clearance is seen in initial months and as the infection becomes chronic, it become more resistant to treatment with passing time. Though great strides have been made in developing new therapies for warts, still the ideal treatment remains elusive. Presently, immunotherapy with tuberculin is the most promising alternative. As tuberculosis is quite prevalent in Indian population, a majority of population is expected to have reasonably high levels of delayed type of hypersensitivity/immunity to tubercular antigens. This combined with BCG vaccination during childhood is likely to enhance delayed hypersensitivity as well as protective immunity towards *Mycobacterium* species. The present study was an open label prospective study in Indian population to determine efficacy of intralesional tuberculin in treatment of *Verruca vulgaris*.

Biography

Pragati Gogia has completed her MBBS from Mauritian University with rank 3 in 1st professional and rank 1 in 3rd professional and distinction in anatomy and ENT. She is currently pursuing DNB Dermatology from Government Medical College and Hospital, Chandigarh, India. She is a member of IADVL.

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Notes:
Quality of life in atopic dermatitis patients

Reem Saeed Alshehri
University of Tabuk, KSA

One of the most common conditions of the skin is Atopic dermatitis (AD) which usually occurs in infants but can also occur among children and adults. The predefined aim of the study was to analyze the affects of AD on the quality of life (QOL) of children or adults and to recognize the most affected areas of a patient's life. QOL is an expansive concept and covers various dimensions of the human life that deals with the understanding of impacts that a disease can have on the QOL of an individual. It also tries to comprehend the outcomes associated with the treatment of patient and the burden of disease. Currently, the awareness regarding the measurement of QOL has augmented as it would be helpful for the physicians to have awareness regarding the patient's views about their illness and its impact on their well being. In order to understand the impact of AD on the patient's life and to understand whether the QOL of the public differs from that of the AD patient, evaluation of the QOL is imperative in the clinical field. The research in this regard is mandatory to make better decisions regarding resource allocation in dermatology to prevent it from suffering the consequences of lack of knowledge. Life threatening conditions as well as social and psychological consequences of this disease has not been documented yet but information regarding its impact on QOL will be helpful in overcoming this disease.

Biography

Reem Saeed Alshehri is graduated Medical Student, Faculty of Medicine, Tabuk University. She has a commitment and appreciation for mentoring and volunteering. She served as a Volunteer in Breast Cancer Convoy to the poor villages outside Tabuk. She has been participated in planning & organization for awareness programs for her University and community. She has completed two in-depth research studies, one being a study of the impact of phototherapy and a broader study on the quality of life in atopic dermatitis patients. She is a Member in Dermatology Student Club.

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Notes: