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Preface: Hot Topics in Dermatology ix

Kenneth J. Tomecki

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New Concepts, Concerns, and Creations in Acne 1

Justin W. Marson and Hilary E. Baldwin

Laboratory monitoring for patients on isotretinoin should include creatinine kinase in athletic males and the more liver-specific gamma glutamyltransferase. There is mounting evidence that acne pathophysiology includes a barrier defect and subsequent microbiome disruption. Avoidance of acne scars with early and aggressive treatment is a more efficient and cost-effective option than subsequent treatment. Laser and light treatments for acne and acne scars are plentiful but poorly supported by evidence-based medicine. The acne pipeline is rich with new chemical entities, new formulations, and combinations of older agents. The gold standard for acne therapy may be changing its face.

Atopic Dermatitis: New Developments 11

Ayan Kusari, Allison M. Han, David Schairer, and Lawrence F. Eichenfield

Herein we review recent developments in our understanding and treatment of atopic dermatitis. Key insights from the recent literature are summarized, from findings on the pathogenesis of this multifactorial disease to a new and more nuanced understanding of its natural history. Therapeutic advances and new data on comorbidities are also discussed.

Contact Dermatitis: Emerging Trends 21

Emily C. Milam and David E. Cohen

The field of contact dermatitis is constantly evolving. Trends in irritant and allergic contact dermatitis are shaped by the introduction of new chemicals, revival of older allergens, industrial practices, and consumer behaviors. This article discusses the most noteworthy trends within the field, organized by allergen category, with particular attention to newer and/or controversial allergens.

Biologics and Psoriasis: The Beat Goes On 29

Hee J. Kim and Mark G. Lebwohl

Psoriasis is a chronic, immune-mediated, inflammatory skin disease that requires long-term therapy for disease control. This article reviews data presented in clinical trials to evaluate and compare various characteristics of biologics that are currently approved for the treatment of psoriasis. Attributes of biological agents that are examined in this article include efficacy, long-term maintenance, overall safety, median time to onset of efficacy, adjustment for body weight, frequency of injections, indication for psoriatic arthritis, and safety in pregnancy. Here, we evaluate what the ideal choice of biological therapy may be for psoriasis patients with specific needs.

Connective Tissue Disease: Current Concepts

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Anthony P. Fernandez

Connective tissue diseases often prominently affect the skin, requiring dermatologists to play an important role in diagnosis and treatment of these patients. Herein we describe updates on the pathogenesis, clinical features, and treatment of 4 major connective tissue diseases: dermatomyositis, cutaneous lupus erythematosus, limited scleroderma (morphea), and cutaneous vasculitis. Many of these updates promise to improve clinical care of patients who suffer from dermatologic involvement of these diseases and are the result of research performed by dermatologists who have expertise in these conditions.

Advances in Inflammatory Granulomatous Skin Diseases

49

Sotonye Imadojemu and Misha Rosenbach

Inflammatory granulomatous dermatitides include cutaneous sarcoidosis, necrobiosis lipoidica, granuloma annulare, and reactive granulomatous dermatitis. The etiopathogenesis of these disorders is not well understood; but the T helper 1 response mediated by interferon-gamma, tumor necrosis factor-alpha, and interleukin (IL) 1, 2, and 6 and the T helper 17 response mediated by IL-17 play a role. These inflammatory granulomatous disorders have extracutaneous manifestations, associations with systemic disease and medication triggers. The authors review these disorders, propose diagnostic and evaluative approaches to these diseases, and explore recent literature with regard to the etiopathogenesis and treatment of these entities.

Comorbidities in Dermatology: What's Real and What's Not

65

Azam Qureshi and Adam Friedman

Comorbidities affecting dermatologic patients are of significant importance to providers and highly relevant for appropriate patient counseling, screening practices, prevention, and treatment. This article seeks to highlight several of the newest findings in the literature regarding comorbidities associated with dermatologic diseases including atopic dermatitis, hidradenitis suppurativa, alopecia areata, chronic urticaria, and the pemphigus family of immunobullous diseases. Further investigation is needed for associations between atopic dermatitis and pancreatic cancer and pemphigus family diseases and chronic obstructive pulmonary disease in order to better characterize the strength of these associations and clinical relevance.

Updates in Melanoma

73

Elisabeth Hamelin Tracey and Alok Vij

Skin cancer is reaching epidemic levels in the United States. Recent advances in the understanding of the pathophysiology of melanoma have allowed improved risk stratification in the revised American Joint Committee on Cancer (AJCC) criteria, new tests to capture patients at higher risk than their stage may indicate, and new treatments to offer hope and cures to patients with advanced disease.

Skin Cancer and Immunosuppression

83

Lindsey Collins, Andrew Quinn, and Thomas Stasko

Immunosuppressed patients are at significantly increased risk of developing cutaneous malignancies. These malignancies are often more aggressive compared with the general population and require multidisciplinary care. This article highlights the incidence and risk factors of cutaneous malignancies in this cohort. The treatment and prevention strategies are discussed. There continues to be a need for

evidence-driven guidelines regarding the management of skin cancers in these patients.

Going Viral 2019: Zika, Chikungunya, and Dengue

95

Jose Dario Martinez, Jesus Alberto Cardenas-de la Garza, and Adrian Cuellar-Barboza

Chikungunya and Zika virus infections are emerging diseases in the Americas, and dengue continues to be the most prevalent arthropod-borne virus in the world. These arbovirus diseases may spread by endemic transmission or as travel-related infections and have rapidly expanded their geographic distribution secondary to vector spread. All 3 share a similar clinical picture that includes a maculopapular rash. Zika is characterized by pruritic rash, low-grade fever, and arthralgia. Congenital nervous system malformations are a growing public-health concern. Chikungunya distinctive dermatologic manifestations include facial melanosis and bullous eruption. Dengue bleeding complications may be life-threatening and require inpatient management.

Cosmeceuticals: What's Real, What's Not

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Zoe Diana Draelos

Cosmeceuticals are cosmetics that promise to deliver physiologically relevant benefits without the incorporation of prescription drugs. To entice consumers to purchase these premium priced products, a story must be told of how the cosmeceutical delivers on these appearance improvement promises. The backbone of any cosmeceutical skin care regimen is facial cleansing and moisturizing. This article reviews the novel ingredients and technologies used to achieve these benefits examining what is real and what is not.

What's New in Cosmetic Dermatology

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Anthony V. Benedetto

Topical silicone gel is more beneficial than petrolatum-based products as an all-purpose wound dressing for granulating and sutured wounds, regardless of cause. Vaginal laser rejuvenation is effective in relieving genitourinary syndrome of menopause, stress urinary incontinence, vaginal relaxation syndrome, and related vulvar disorders. New cosmetic indications in the upper face for onabotulinumtoxinA have been approved by the Food and Drug Administration, whereas off-label treatments in the lower face increase in popularity. Clinical trials of uncomplexed daxibotulinumtoxinA demonstrate safety and efficacy lasting more than 6 months.