

Autoinflammatory disorders- Dr. Naik

Dr. Naik discusses rare monogenic autoinflammatory diseases and the mechanisms that drive them. Such diseases discussed were cryopyrinopathies such as Familial Cold Autoinflammatory Syndrome (FCAS), Muckle Wells Syndrome (MWS), and Neonatal Onset Multisystem Inflammatory Disease (NOMID). Other autoinflammatory diseases discussed were Pyogenic Arthritis, Pyoderma gangrenosum, and Acne (PAPA) syndrome, Deficiency of the IL-1 Receptor Antagonist (DIRA), and Deficiency of the IL-36 Receptor Antagonist (DITRA). The gene defects, the mode of inheritance, clinical phenotypes, and the mechanisms and treatments associated with each disease were highlighted.

Immune-checkpoint Inhibitor Induced Autoimmunity- Dr. Rosenbach

Dr. Rosenbach discusses the cutaneous adverse effects of checkpoint inhibitors used to treat cancer. He emphasizes the large role dermatologists have to play when patients are treated with these agents that may have immune-mediated side effects. Cutaneous manifestations discussed included morbilliform eruptions, pruritis, lichenoid eruptions, bullous pemphigoid, alopecia areata, vitiligo, psoriasis, and SJS/TEN-like reactions. Dr. Rosenbach emphasized the importance of acknowledging drugs patients are receiving for treatment of their malignancy that could be causing a classic cutaneous reaction pattern. Dr. Rosenbach noted patients receiving checkpoint inhibitors can develop autoimmune disease and it is important that dermatologists recognize these manifestations in this subset of individuals and help to apply better targeted treatment to help these patients.

Hair Loss in Skin of Color Update- Dr. Alexis

Dr. Alexis discusses hair loss in skin of color, a common area encountered in clinical practice. He offers useful tips and pearls to help dermatologists optimize patient visits and outcomes. Dr. Alexis mentions the cultural variations, various practices and hairstyles seen in skin of color populations. He also describes the types of scarring and non-scarring alopecia that have a higher prevalence in skin of color patients in addition to the clinical characteristics and diagnostic pearls. When discussing hair loss in skin of color patients, Dr. Alexis emphasizes the importance of a culturally competent approach. He provided tools and sample language on how to approach patients in race-discordant patient-physician interactions and explained the importance of familiarizing with hair styles in women of African ancestry.

Special Issues in Acne, Acne Keloidalis, and Related Disorders in Skin of Color- Dr. Del Rosso

Dr. Del Rosso discussed the pathophysiology and management of acne in addition to the racial differences encountered with acne. Although acne does impact every racial population, Dr. Del Rosso brought attention to skin of color patients that tend to be bothered by scarring and hyperpigmentation. He also explained potentiating factors for acne such as a diet heavy in dairy and whey protein and low in Omega-3 fatty acids, which is shown to reduce acne inflammation. Agents such as topical clascoterone cream 1%, the first FDA approved topical androgen receptor inhibitor in patients 12 years of age and older, tazarotene 0.045% lotion, microencapsulated benzoyl peroxide 3% and tretinoin 0.1%, and sarecycline were presented for the treatment of acne. Lastly, Dr. Del Rosso discussed the lack of progress made with acne keloidalis nuchae but noted its prominence in skin of color populations.

Vitiligo in Skin of Color Updates- Dr. Alexis

Skin of color patients with vitiligo may encounter a greater quality of life impact due to visual contrast and

potential cultural considerations. Dr. Alexis discusses the differences in treating skin of color patients with vitiligo as well as the exciting new updates in treatment. He mentions the current treatment algorithm based on body surface area and the general treatment approach with topical corticosteroids, topical calcineurin inhibitors, phototherapy, topical and oral immunosuppressants, and surgical techniques. In addition, he discusses the promising pipeline of vitiligo treatments such as oral and topical JAK inhibitors (ruxolitinib and tofacitinib), topical bimatoprost solution, an anti-IL-15 monoclonal antibody, antimetabolites such as methotrexate, and alpha-MSH analogs such as afamelanotide.

Lupus for the Dermatologist- Dr. Merola

Dr. Merola discusses the interface between the cutaneous lupus patient and systemic disease, how one may approach systemic activity in the cutaneous lupus patient, and the therapeutic ladder in cutaneous lupus and in systemic disease manifestations. As patients with lupus often present to the dermatologist first, Dr. Merola highlights the importance of systemic lupus monitoring. Screening laboratory tests, a specific review of symptoms and physical exam were explained to better inform physicians how to approach systemic disease. Dr. Merola also discusses the criteria for systemic lupus erythematosus and management considerations when it comes to different symptoms experienced. Cutaneous lupus +/- systemic lupus treatment considerations include lifestyle changes such as photoprotection, Vitamin D supplementation, and smoking cessation. In addition, Dr. Merola highlights medications such as topical corticosteroids, hydroxychloroquine, methotrexate, mycophenolate mofetil, and thalidomide. Unique to his presentation was the rheumatologist perspective for treatment considerations in systemic disease patients, which corresponds to the end organ involved, and how dermatologists can begin to co-manage.

Granulomatous disease- Dr. Rosenbach

Dr. Rosenbach discusses granulomatous diseases such as sarcoidosis, granuloma annulare, necrobiosis lipoidica, and necrobiotic xanthogranuloma. The clinical and histological manifestations of each disease were highlighted as well as emerging treatments. In sarcoidosis, the JAK/STAT pathway and the mTOR pathway may be critically important in granuloma formation, giving rise to the therapeutic targets that are being explored. In granuloma annulare, based on recent clinical trials, topical and oral JAK inhibitors and IL-4 inhibitors may be new treatment modalities. Emerging data for necrobiosis lipoidica treatment are topical JAK inhibitors.

Rheum-Derm Perspective on Psoriatic Disease

Dr. Gottlieb and Dr. Merola discuss why psoriatic arthritis is important to diagnose and treat as it goes undiagnosed in up to 41% of cases. The domains of psoriatic arthritis and treatments targeting these domains were described. Additionally, implementation of the PEST screening tool, PsAID12 questionnaire, and IDEOM MSK-8 may help diagnose and treat-to-target psoriatic arthritis.

IBD Considerations for the Dermatologist

Dr. Stidham provided a review of the two inflammatory bowel diseases (IBD): ulcerative colitis and crohn's. He discusses the complications and mucocutaneous manifestations of IBD occurring in 5-20% of this population. Dr. Stidham highlights physician awareness of these symptoms, which include hidradenitis suppurativa, plaque psoriasis, aphthous stomatitis, erythema nodosum, and pyoderma gangrenosum.

Dr. Naik- Co-morbidities of HS

Dr. Naik discusses the epidemiology and comorbidities of Hidradenitis Suppurativa (HS). Through a qualitative study, she discovered the patient perspective about living with HS, the associated stigma, lack of access to doctors, and lack of education about their diagnosis for years. Additionally, she mentions the increased risk of anxiety, depression, obesity, and suicide faced and why dermatologists should care about these burdens.

Immune-checkpoint Inhibitor Induced Autoimmunity- Dr. Rosenbach skin manifestations of cytotoxic chemotherapy agents.

Dr. Rosenbach discusses the cutaneous adverse effects of checkpoint inhibitors used to treat cancer. He emphasizes the large role dermatologists have to play when patients are treated with these agents that may have immune-mediated side effects. Cutaneous manifestations discussed included morbilliform eruptions, pruritis, lichenoid eruptions, bullous pemphigoid, alopecia areata, vitiligo, psoriasis, and SJS/TEN-like reactions. Dr. Rosenbach emphasized the importance of acknowledging drugs patients are receiving for treatment of their malignancy that could be causing a classic cutaneous reaction pattern. Dr. Rosenbach noted patients receiving checkpoint inhibitors can develop autoimmune disease and it is important that dermatologists recognize these manifestations in this subset of individuals and help to apply better targeted treatment to help these patients.

Hair Loss in Skin of Color Update- Dr. Alexis

Dr. Alexis discusses hair loss in skin of color, a common area encountered in clinical practice. He offers useful tips and pearls to help dermatologists optimize patient visits and outcomes. Dr. Alexis mentions the cultural variations, various practices and hairstyles seen in skin of color populations. He also describes the types of scarring and non-scarring alopecia that have a higher prevalence in skin of color patients in addition to the clinical characteristics and diagnostic pearls. When discussing hair loss in skin of color patients, Dr. Alexis emphasizes the importance of a culturally competent approach. He provided tools and sample language on how to approach patients in race-discordant patient-physician interactions and explained the importance of familiarizing with hair styles in women of African ancestry.

Special Issues in Acne, Acne Keloidalis, and Related Disorders in Skin of Color- Dr. Del Rosso

Dr. Del Rosso discussed the pathophysiology and management of acne in addition to the racial differences encountered with acne. Although acne does impact every racial population, Dr. Del Rosso brought attention to skin of color patients that tend to be bothered by scarring and hyperpigmentation. He also explained potentiating factors for acne such as a diet heavy in dairy and whey protein and low in Omega-3 fatty acids, which is shown to reduce acne inflammation. Agents such as topical clascoterone cream 1%, the first FDA approved topical androgen receptor inhibitor in patients 12 years of age and older, tazarotene 0.045% lotion, microencapsulated benzoyl peroxide 3% and tretinoin 0.1%, and sarecycline were presented for the treatment of acne. Lastly, Dr. Del Rosso discussed the lack of progress made with acne keloidalis nuchae but noted its prominence in skin of color populations.

Vitiligo in Skin of Color Updates- Dr. Alexis

Skin of color patients with vitiligo may encounter a greater quality of life impact due to visual contrast and potential cultural considerations. Dr. Alexis discusses the differences in treating skin of color patients with vitiligo as well as the exciting new updates in treatment. He mentions the current treatment algorithm based on body surface area and the general treatment approach with topical corticosteroids, topical calcineurin inhibitors, phototherapy, topical and oral immunosuppressants, and surgical techniques. In addition, he discusses the promising pipeline of vitiligo treatments such as oral and topical JAK inhibitors (ruxolitinib and

tofacitinib), topical bimatoprost solution, an anti-IL-15 monoclonal antibody, antimetabolites such as methotrexate, and alpha-MSH analogs such as afamelanotide.

AI in Dermatology- Dr. Darrell Rigel

Dr. Rigel discussed the use of artificial intelligence (AI) in dermatology and mentions how dermatologists focus their work on narrow AI, which is created to solve one given problem, whereas general AI focuses on solving multiple tasks. Additionally, Dr. Rigel described recent studies of using AI in diagnostic dermatology and its advantages and limitations as well as machine learning in melanoma and non-melanoma skin cancer. AI and its use in psoriasis, atopic dermatitis, onychomycosis, and rosacea was also mentioned. Although AI has made advances in the field of dermatology, it is still early and will not replace dermatologists diagnostically. Dr. Rigel concluded his presentation discussing the potential future of dermatopathology and AI.

What's New in Topical Therapies- Dr. Del Rosso

Dr. Del Rosso discusses FDA approved topical agents for dermatologic diseases. He first describes a combination therapy of halobetastol propionate 0.01%/ tazarotene 0.045% lotion that is FDA approved for psoriasis. The benefits of this therapy are improved delivery of active ingredients, improved tolerability due to its polymeric emulsion technology, and prolonged maintenance of effect post-treatment. Tirbanibulin 1% ointment is FDA approved for Actinic Keratoses on the face or scalp in adults. Phase 3 study outcomes suggest 44-54% efficacy and a favorable tolerability profile. It is a new synthetic chemical entity that exhibits anti-proliferative and anti-tumoral activity. Additionally, Ruxolitinib, a topical janus kinase inhibitor is FDA approved for ages 12 and older for atopic dermatitis. Recent phase 3 trials demonstrate its efficacy and favorable safety profile, despite its black box warnings. Lastly, topical roflumilast is a PDE-4 inhibitor used to treat signs and symptoms of plaque psoriasis based on data from phase 1/2a studies.