MASTERCLASSES IN DERMATOLOGY



Meeting Minutes

Here's what you missed if you are not at Masterclasses in Dermatology in Puerto Rico.

No need to hear about it second hand! Join us live in Sarasota next year - February 20-23, 2025 at the Ritz Carlton Sarasota.

Learn more at www.masterclassesindermatology.com.

Lecture Summaries – Friday, February 16, 2024

Dr. Susan Taylor, MD - Alopecia Areata

In a presentation by Dr. Susan Taylor, MD, the complex landscape of alopecia areata was illuminated, shedding light on its epidemiology, pathogenesis, clinical presentations, and promising treatment avenues. Contrary to previous assumptions, new data revealed a higher prevalence among Asian and Black patients, challenging misconceptions about ethnic predispositions. Dr. Taylor emphasized the substantial impact on patients' quality of life, underscoring the urgent need for effective interventions. Delving into the pathogenesis, she elucidated the disorder's immune-mediated nature, implicating T cells, pro-inflammatory cytokines, and genetic factors. Clinical manifestations, including patchy, diffuse, and total hair loss patterns, were discussed alongside dermatoscopic findings, such as the distinctive "exclamation point" hair. Exciting advancements in treatment, particularly with novel therapies like ritlecitinib and baricitinib, were showcased, with compelling results from clinical trials demonstrating significant improvements in severity scores and regrowth. Furthermore, emerging treatments like upadacitinib and other Jak inhibitors offer promising avenues for exploration. Dr. Taylor's presentation underscored the importance of tailored approaches to alopecia areata management and highlighted the ongoing pursuit of innovative solutions to address this challenging condition.

Dr. Peter Lio, MD - Pediatric Atopic Dermatitis and Psoriasis

Dr. Peter Lio, MD provided valuable updates on pediatric atopic dermatitis (AD) and psoriasis, shedding light on the challenges and advancements in managing these conditions. With AD affecting approximately 10 million children and over 16 million adults in the U.S., Dr. Lio emphasized the substantial disease burden and financial implications faced by patients and healthcare systems. He highlighted the complexity of eczema, citing its heterogeneous nature and the significant hurdles in achieving and maintaining clearance safely. Exploring the inflammatory loop underlying AD, Dr. Lio discussed the crucial role of the skin barrier, dysbiosis, and inflammatory mediators in driving itch and inflammation. He outlined the five pillars of eczema management: barrier repair, psychological support, inflammation control, microbiome modulation, and itch management. Furthermore, Dr. Lio discussed the potential link between aggressive treatment and reduced food allergies. Regarding psoriasis, he addressed its systemic nature and the importance of controlling the disease to potentially alter its course over time. Dr. Lio highlighted various FDA-approved treatments for psoriasis in children and emerging non-steroidal topicals. Throughout the lecture, he emphasized the importance of moisturizing in eczema and psoriasis management, underscoring its significant role alongside medical interventions.

Dr. Marina Peredo, MD – Updates in Fillers and Lasers

Dr. Marina Peredo, MD, shared important updates in minimally invasive aesthetics, focusing on advancements in botulinum toxin, fillers, and lasers. In the realm of botulinum toxins, Dr. Peredo highlighted the recent approval of daxibotulinumtoxin A, marking a significant breakthrough after two decades of minimal innovation. Daxibotulinumtoxin A, formulated without human serum albumin, demonstrated extended duration compared to previous products, with an average of 6 months for treating glabellar lines. Moving on to fillers, she categorized them into space-filling, biostimulatory, and biological scaffolds, noting the emergence of biological scaffolds as a promising avenue in aesthetic medicine. Dr. Peredo discussed an innovative approach utilizing engineered biologic matrices from fetal bovine dermis, which acts as a scaffold to promote natural volume restoration when injected into the skin. In the realm of lasers, she addressed the limitations of existing technologies, including imprecise tissue targeting and unpredictable outcomes. Introducing the MIRIA laser, equipped with 3D technology and proprietary skin AI visualization, Dr. Peredo highlighted its precision targeting capabilities, delivering maximal energy to the dermis while sparing the epidermis. With FDA clearance for high-energy skin renewal, the MIRIA laser offers advanced imaging for real-time, highresolution skin analysis. Peredo's insights underscore the rapid advancements reshaping the landscape of aesthetic medicine.

Dr. Ryan Stidham, MD - AI in IBD: What is the Gastroenterology Perspective?

Dr. Ryan Stidham, MD, delved into the transformative potential of artificial intelligence (AI) in inflammatory bowel disease (IBD). He elucidated core AI technologies driving advancements in medicine, including automated information extraction, computer vision, natural language processing, and generative AI models like GPT and LLM. Dr. Stidham emphasized the ubiquitous presence of AI image analysis in dermatology, enabling lesion classification and automated skin cancer detection. He discussed the potential of AI to quantify disease, citing examples such as psoriasis quantitation and the Mayo score in IBD. Dr. Stidham also addressed the evolving role of large language models (LLMs), detailing their mechanisms and applications in healthcare documentation, such as generating clinical notes and procedure reports. He cautioned against AI-enabled complacency and potential conflicts arising from disparities in access and decision-making, underscoring the importance of ethical considerations in AI integration. Additionally, Dr. Stidham raised concerns about the potential exacerbation of burnout if AI primarily handles straightforward cases, leaving healthcare professionals to manage complex patients. Overall, his insights shed light on the promises and challenges associated with AI integration in IBD management.

Dr. David Fisher, MD – Graying and the Melanocyte: Mechanisms and Melanoma Implications

Dr. David Fisher, MD, presented a fascinating exploration into the mechanisms underlying hair graying and its connection to stress. Dr. Fisher delved into the intricacies of the hair follicle cycle, emphasizing the crucial role of melanocyte stem cells in hair pigmentation. He discussed findings from studies in mice, revealing that depletion of these stem cells leads to hair devoid of pigment, resulting in graying. Moreover, Dr. Fisher elucidated the impact of stress on hair pigmentation, highlighting experiments where stressful stimuli induced depigmentation in mice. Notably, Dr. Fisher identified the role of adrenergic signaling in this process, linking the sympathetic nervous system to the depletion of melanocyte stem cells. Furthermore, he discussed potential therapeutic interventions, including using beta blockers to prevent hair graying, offering insights into future approaches for repigmentation. Additionally, Dr. Fisher discussed intriguing connections between the pathogenesis of hair graying and melanoma, suggesting potential avenues for exploring novel treatment strategies. Overall, his insights shed light on the intricate

interplay between stress, pigmentation, and hair biology, offering new perspectives for understanding and potentially mitigating the effects of hair graying.

Dr. Susan Taylor, MD - Managing Keloids

Dr. Susan Taylor, MD, provided insightful perspectives on the challenges and management strategies for keloids, emphasizing their profound impact on patients' quality of life. Keloids, characterized by abnormal scar formation, correlate significantly with diminished health-related quality of life, increased pain, and itchiness. The severity of keloids, assessed through the Vancouver Scar Scale, directly correlated with impaired quality of life. Dr. Taylor discussed various management approaches, including intralesional therapies such as corticosteroids, 5-FU, and bleomycin injections, which are the mainstay for most keloidal scars. Notably, the EPI device, a needle-free electronically controlled injector, showed promising results and patient preference in keloid treatment. Combination therapies, such as 5-FU combined with triamcinolone, and triple therapy protocols involving excision, injection, and pressure devices, demonstrated improved outcomes. Cryotherapy, lasers, and novel agents like dupilumab, which blocks pro-fibrotic mediators, also offered potential treatment avenues. Additionally, studies on topical losartan and pentoxifylline showed promise but require further investigation. Dr. Taylor's comprehensive overview underscores the multifaceted nature of keloid management and the evolving landscape of therapeutic interventions to improve patient outcomes.

Dr. Hugh Sampson, MD – Urticaria

Dr. Hugh Sampson, MD, delved into the intricacies of urticaria, a condition marked by the sudden appearance of wheals or hives, often accompanied by severe itching. He delineated the features of urticaria, including its transient nature, absence of scarring, and association with angioedema. Urticaria can manifest as acute or chronic, with various underlying causes ranging from IgE-mediated mechanisms to infections and physical triggers. Dr. Sampson detailed types of inducible urticaria such as dermographism, cholinergic urticaria, and cold-induced urticaria, each with distinct diagnostic tests and management strategies. He also outlined evaluation methods for chronic spontaneous urticaria. Management protocols involve stepwise approaches, starting with non-sedating antihistamines and progressing to more potent therapies like omalizumab and cyclosporine. Dr. Sampson's comprehensive overview provides valuable insights into the diagnosis and treatment of urticaria, aiding clinicians in effectively managing this challenging condition.

Dr. Alice Gottlieb, MD, PhD - What's new in Psoriasis?

Dr. Alice Gottlieb, MD, PhD, provided an in-depth exploration of recent advancements in psoriasis treatment during her presentation. She highlighted the efficacy of IL-17 inhibitors such as secukinumab, ixekizumab, brodalumab, and bimekizumab, emphasizing their effectiveness in controlling PsA symptoms and inhibiting radiographic progression. Bimekizumab, in particular, demonstrated superiority over other treatments in clinical studies but may pose a higher risk of candida infections. Dr. Gottlieb also discussed the potential of IL-23 inhibition with drugs like guselkumab, risankizumab, and tildrakizumab, especially in combination therapy for PsA. Additionally, she addressed the emergence of TNF biosimilars and novel treatments like spesolimab for generalized pustular psoriasis, highlighting their rapid efficacy in clearing skin flares. Furthermore, she presented findings suggesting that biologic use in psoriasis patients may decrease the risk of developing PsA, indicating promising implications for preventive treatment strategies. Overall, her comprehensive overview sheds light on the evolving landscape of psoriasis management, providing valuable insights for clinicians and researchers alike.

Dr. Martina Porter, MD - Therapeutic Drug Monitoring and Weight Loss in HS

Dr. Martina Porter, MD, tackled several complex issues surrounding therapeutic monitoring and weight management in Hidradenitis Suppurativa (HS). She explored the relevance of therapeutic drug monitoring (TDM) for patients on biologics, particularly addressing the efficacy of adalimumab in HS. Dr. Porter highlighted the importance of proactive TDM, emphasizing its potential to optimize therapy and prevent antibody formation. Drawing parallels with inflammatory bowel disease (IBD), she underscored the cost-effectiveness and improved clinical outcomes associated with TDM. Furthermore, Dr. Porter discussed the challenges of defining treatment response in HS and the need for personalized dosing strategies. She examined factors influencing drug clearance, such as body mass index (BMI) and inflammatory burden, and their impact on treatment efficacy. Additionally, Dr. Porter explored the association between antidrug antibodies, subtherapeutic adalimumab levels, and treatment response, shedding light on the complexities of managing HS.

Dr. Mark Kaufmann, MD - Why Drugs Cost So Much

Dr. Mark Kaufmann, MD, addressed the soaring costs of medications, pinpointing pharmacy benefit managers (PBMs) as key players in the pricing dynamics. PBMs, like Express Scripts, CVS Caremark, and OptumRx, wield considerable influence over drug

coverage and pricing negotiations for insurance companies. Over time, PBMs have expanded their reach, now intertwined with health insurance entities, and controlling various aspects of the healthcare supply chain. Dr. Kaufmann highlighted PBM strategies such as copay clawbacks and spread pricing, shedding light on their impact on medication costs and patient access. Despite efforts by organizations like the American Academy of Dermatology to advocate for transparency and legislative reforms, challenges persist, leaving patients and healthcare professionals to navigate a complex landscape of medication pricing and access.

Dr. Joseph Merola, MD MMSc - What's new in Lupus?

Dr. Joseph Merola, MD MMSc provided insights into the evolving landscape of lupus management, specifically focusing on cutaneous lupus erythematosus (CLE). He outlined a structured approach to patient management, including lifestyle modifications, vitamin D supplementation, and the consideration of drug-induced CLE or systemic lupus erythematosus (SLE). Antimalarials were emphasized as first-line therapy, with second-line options including methotrexate, mycophenolate, and acitretin, albeit with considerations for pregnancy. Despite challenges in research heterogeneity and regulatory hurdles, efforts are underway to establish standardized measures like the CLASI and CLA-IGA-R for clinical trials. Exciting emerging therapies such as anifrolumab, litifilimab, and daxdilimab offer promising prospects in targeting type 1 interferon responses. Additionally, cellular and cytokine approaches, alongside CD19-targeted CAR T Cells, represent novel avenues for refractory cases. Dr. Merola underscored the importance of interdisciplinary collaboration between dermatologists and rheumatologists to optimize patient care and treatment outcomes.

Dr. Dennis Orgill, MD - Surgical Management of HS

Dr. Dennis Orgill, MD discussed surgical interventions for managing hidradenitis suppurativa (HS), a challenging condition marked by chronic inflammation and abscess formation in skin folds. Surgical options such as unroofing, local tissue rearrangement, flaps, skin grafts, and recycled skin offer avenues for treatment. However, HS presents unique challenges, including obesity, comorbid conditions like Crohn's disease, smoking, and anatomical considerations. Surgery may not be advisable for smokers, morbidly obese individuals, diabetics, or those with unrealistic expectations. Dr. Orgill emphasized that surgery does not cure HS, and most patients still require dermatological management. Despite challenges, surgical interventions can significantly improve the quality of life for HS patients, especially when tailored to individual needs and supplemented with newer techniques and technologies to reduce surgical morbidity.

Dr. Mark Kaufmann, MD – Camp Discovery and AAD Philanthropic Efforts

Dr. Mark Kaufmann, MD, highlighted the American Academy of Dermatology's (AAD) philanthropic initiatives, including the Shade Structure Grant Program, which funds permanent shade structures for outdoor areas lacking sun protection. The AAD also runs the SPOT Skin Cancer Screening program, providing free screenings, and conducts a May Skin Cancer Awareness Campaign. Camp Discovery hosts children with chronic skin conditions for a week of fun activities, fostering growth and camaraderie. Since 1993, over 6,000 campers have benefited from this program across six locations, offering around 4,500 volunteer opportunities. The initiative not only impacts campers positively but also provides valuable experiences for physicians and other volunteers.

Dr. Scott Elman, MD - Dermatomyositis

Dr. Scott Elman, MD, delved into dermatomyositis, emphasizing its various phenotypes and systemic considerations. These include juvenile and adult dermatomyositis and clinically amyopathic dermatomyositis, which manifests as a skin rash without muscle involvement. Key systemic considerations include skin, muscle, and lung diseases and the potential for malignancy. Myositis-specific antibodies aid diagnosis and guide management, albeit with varying test sensitivities and specificities. Dr. Elman highlighted different antibody phenotypes, such as MDA5, associated with interstitial lung disease, and anti-TIF1-gamma, linked to malignancy. Muscle evaluation involves history, strength exams, biomarkers like CK/aldolase, and imaging. Lung disease assessment includes functional tests and imaging. The association with malignancy necessitates vigilance. Treatment strategies vary based on muscle disease severity, malignancy presence, and lung involvement. Therapeutic modalities encompass sun protection, topical agents, systemic corticosteroids, and emerging treatments like JAK inhibitors and anifrolumab. Dr. Elman underscored the evolving landscape in dermatomyositis management, promising new avenues for treatment.

Dr. Marina Peredo, MD - Exosomal Therapy: A New Frontier in Regenerative Medicine

Dr. Marina Peredo, MD, discussed the emerging field of exosomes, nanoscopic spheres that serve as carriers for signaling molecules between cells. These extracellular vesicles hold promise in regenerative medicine, with implications for cardiac and tendon regeneration, wound healing, hair growth, pain management, and anti-aging. Their content, including growth factors and nucleotides, is crucial in reducing inflammation and promoting regeneration. Exosomes are sourced from various sources, such as umbilical

cord mesenchymal stem cells and adipose-derived stem cells, although no FDA-approved exosome products currently exist. Clinicians must navigate off-label use carefully, considering product selection and understanding the source of exosomes. Despite regulatory challenges, exosomes represent a promising avenue in regenerative medicine, alongside PRP and stem cells.

Dr. Leon Kircik, MD - Interpretation of Clinical Trial Results

Dr. Leon Kircik, MD, delved into the complexities of interpreting clinical trial results, emphasizing the nuances that can significantly impact treatment guidelines, provider recommendations, and healthcare policy. He highlighted the variations in study design considerations, emphasizing the importance of randomized controlled clinical trials as the gold standard. Dissecting the data involves scrutinizing the disease states studied, demographics, and eligibility criteria. Dr. Kircik discussed the challenges of comparing results from different trials, particularly due to the lack of standardized assessment scales and statistical analysis methods. He outlined different approaches to handling missing data, including intent-to-treat analysis, non-responder imputation, and per-protocol analysis. The lecture also addressed the motivations behind patient participation in clinical trials and reasons for discontinuation. Dr. Kircik concluded by discussing the challenges in studying mild psoriasis and the importance of long-term endpoints in chronic disease management.

Dr. Daniel Siegel, MD - Managing Complications of Dermatologic Surgery

Dr. Daniel Siegel, MD, provided insights into managing complications of dermatologic surgery with a focus on mitigating bleeding risks and ensuring patient comfort and safety throughout the procedure. He emphasized a proactive approach to addressing potential complications associated with pathologic anticoagulation, such as thrombocytopenia or platelet dysfunction, by collaborating with hematologists. Dr. Siegel stressed the importance of optimizing the pre-operative environment, including maintaining patient medication regimens and creating a calm, comfortable setting. Key techniques discussed included the use of lidocaine with epinephrine for anesthesia, tumescent anesthesia for larger lesions, and meticulous attention to injection techniques. He highlighted strategies for identifying and managing bleeders during surgery and provided practical advice on suturing and wound closure to promote optimal healing. Additionally, Dr. Siegel touched upon considerations regarding pacemakers and defibrillators and outlined principles for achieving hemostasis, including the use of electrosurgical devices and hemostatic products.

Dr. Peter Lio, MD – Alternative Medicine in Dermatology

Dr. Peter Lio, MD, explored the landscape of alternative medicine in dermatology, shedding light on why patients often seek alternative treatments and how integrative medicine approaches can complement conventional therapies. He addressed common concerns such as steroid phobia and the desire for natural remedies, emphasizing the importance of a multi-disciplinary approach to treatment. Dr. Lio discussed several alternative treatments supported by research findings, including oral hempseed oil for atopic dermatitis, topical coconut oil for antibacterial activity and moisturization, and topical vitamin B12 for managing flare-ups in atopic dermatitis. He also highlighted the efficacy of black tea compresses for facial dermatitis and fish oil supplementation for its anti-inflammatory properties in psoriasis. Additionally, Dr. Lio discussed the use of indigo for psoriasis and garlic for treating warts, underscoring the potential of alternative approaches in dermatological care.

for more information:
www.masterclassesindermatology.com
or
call 781-793-0088

