

DEPARTMENT OF DERMATOLOGY, VENEREOLOGY AND LEPROSY

SREE BALAJI MEDICAL COLLEGE AND HOSPITAL, CHENNAI

SYMPOSIUM (17TH JULY 2025)

Dr. Madhumita – Moisturizers

Dr. Laasyaa – Sunscreens

The first presentation was by Dr. Madhumita on the topic Moisturizers. The session began with an overview of the skin barrier and the importance of maintaining hydration through the stratum corneum. She elaborated on the role of the natural moisturizing factor (NMF), the "bricks and mortar" model of the skin barrier, and how moisturizers support the restoration of barrier integrity. Different classes of moisturizers—emollients, humectants, and occlusives—were discussed in detail with mechanisms, examples (like ceramides, glycerin, urea), and recent advancements including nanoencapsulated triceramides. Dr. Madhumita also explained the therapeutic roles of moisturizers including their anti-inflammatory, antimutagenic, antipruritic, and photoprotective effects. Special additives such as aloe vera, allantoin, oatmeal, and vitamins C & E were also touched upon. The importance of proper application technique and choosing suitable formulations (lotions, creams, gels, ointments) based on patient needs was highlighted. Finally, common indications, ideal properties of moisturizers, and possible adverse effects were discussed.

This was followed by a presentation on Sunscreens by Dr. Laasyaa. The symposium on sunscreen provided a comprehensive overview of photoprotection, beginning with an introduction and the historical evolution of sunscreens. Key characteristics of an ideal sunscreen were outlined, including broad-spectrum coverage, photostability, safety, and cosmetic acceptability. The efficacy of sunscreens was discussed in detail, covering UVA indices such as IPD, PPD, and PFA, as well as UVB indices like SPF and substantivity. Concepts like UPF (Ultraviolet Protection Factor) and the role of topical and systemic sunscreens were highlighted. The types of sunscreens—organic (chemical), inorganic (physical), and combination filters—were reviewed with clinical relevance. Indications for sunscreen use across age groups, methods of

application, and the importance of regular reapplication were emphasized. Emerging innovations, such as microencapsulation, nanoparticle delivery systems, and DNA-repair enzyme–infused formulations, were explored. The session concluded with insights into the future of sunscreens, including smart wearable UV detectors and advanced, patient-friendly formulations aimed at improving compliance and protection.

The session was concluded by Assistant Professor Dr. Balakumaran, who emphasized the importance of integrating moisturizers and sunscreens into routine dermatological practice for both therapeutic and preventive care.

