



# INFLAMMATION NOW THE KEY TARGET FOR SEBORRHEIC DERMATITIS

Major Gheorghe Giurgiu<sup>1</sup>, Prof dr med Manole Cojocaru<sup>2,3</sup>

<sup>1</sup>Deniplant-Aide Sante Medical Center, Biomedicine, Bucharest, Romania

[deniplant@gmail.com](mailto:deniplant@gmail.com); Telephone: +40 744 827 881

<https://orcid.org/0000-0002-5449-2712>

<sup>2</sup>Academy of Romanian Scientists

<sup>3</sup>Titu Maiorescu University, Faculty of Medicine, Bucharest, Romania

[cojocaru.manole@gmail.com](mailto:cojocaru.manole@gmail.com); Telephone: +40 723 326 663

<https://orcid.org/0000-0002-7192-7490>



**Seborrheic dermatitis is a common skin inflammatory condition.**

**Evidence for dysbiosis as a source of disease pathology is well-documented in inflammatory skin conditions, such as seborrheic dermatitis.**

**An increasing body of literature suggests a crucial role for the gut microbiome in modulating systemic inflammatory disease.**

**Seborrheic dermatitis is a chronic systemic inflammatory disease and its pathogenesis is related to the interaction between genetic susceptibility, immune response and environmental triggers, such as diet, stress-level, skin-care routine, etc.**



**Nutrition plays an important role in the development of seborrheic dermatitis and it can modulate microbiota and microbiome composition.**

**Correct food choices may have a crucial role in the pathogenesis of seborrheic dermatitis.**

**Life-style and dietary habits might be related to the incidence and severity of seborrheic dermatitis.**

**The treatment of seborrheic dermatitis patients requires multidisciplinary treatment approach not only at improving skin symptoms, but also at managing metabolic, nutritional, socio-psychological comorbidities that often are associated with this disease.**



centrul medical  
**aide sante**

Laboratorul de analize medicale  
Centrul de Biomedicină



**The gut-skin axis is the novel concept of the interaction between skin diseases and microbiome through inflammatory mediators, metabolites and the intestinal barrier.**

**The dysregulated skin microbiota may become a novel therapeutic target in seborrheic dermatitis patients.**

**Seborrheic dermatitis is a common skin disease, with chronic inflammation and a complex etiology.**

**The association between the gut and skin is strong and bidirectional, and gastrointestinal health is associated with skin homeostasis.**



**Increasing evidence shows the existence of the gut-skin axis, and that an imbalanced gut microbiome can induce inflammatory skin diseases.**

**The gut microbiome can mediate crosstalk between the immune system and the nervous system by secreting neurotransmitters in seborrheic dermatitis.**

**The "skin-gut axis" concept provides a new insight to investigate the association between the intestinal microbiota and the skin.**

**This offers a feasible approach for improving skin conditions, by the modulation of the gut microbiota.**



centrul medical  
**aide sante**

Laboratorul de analize medicale  
Centrul de Biomedicină



**Several types of neurotransmitters secreted by gut microbes were selected to investigate their potential function in seborrheic dermatitis.**

**Microbiome-mediated interventions could be designed to manipulate these targets for the treatment of seborrheic dermatitis.**

**Furthermore, studies also found that an important connection between emotional states and inflammatory skin conditions can be regulated by bacteria of the gastrointestinal tract**



centrul medical  
**aide sante**

Laboratorul de analize medicale  
Centrul de Biomedicină



**Through an extensive review of the literature, we aim to discuss the skin and gut microbiota and redefine their role in the pathogenesis of seborrheic dermatitis.**

**With the help of Deniplant brand, Gheorghe Giurgiu has developed several nutraceuticals for seborrheic dermatitis that act as immunomodulators of the human microbiome.**

**Hence, it is crucial to understand nutraceuticals impact on the seborrheic dermatitis skin microbiota which is thought to be perturbed, our study provides insight into the skin microbiota in seborrheic dermatitis and how it is modulated by nutraceuticals and diet.**



centrul medical  
**aide sante**

Laboratorul de analize medicale  
Centrul de Biomedicină



**Deniplant tea prevents and treats the internal causes that trigger and maintain seborrheic dermatitis by naturally modulating the intestinal and skin microbiome.**

**Removing dysbiosis from the intestinal microbiota can prevent and eliminate complications caused by seborrheic dermatitis.**

**It contains cultivated medicinal plants, berries and flora, fruit tree buds.**



**With the understanding that the brain-gut-skin axis exists, it is now clear that intestinal microbes have significant effects on seborrheic dermatitis.**

**These results are supported by clinical observations based on a case series showing improvement in seborrheic dermatitis skin lesions after antibiotic treatment, modulation of gut microbiota by probiotics or fecal microbial transplantation.**



centrul medical  
**aide sante**  
Laboratorul de analize medicale  
Centrul de Biomedicină



**We confirmed the association of seborrheic dermatitis and gut microbiota dysbiosis.**

**This study provides a detailed and comprehensive systematic review regarding gut microbiome in patients with seborrheic dermatitis.**

**It is still not clear whether seborrheic dermatitis is an effect or a cause of the observed disbalance between beneficial and pathogenic microbes.**

**Much less is known about the potential relationship between the composition of gut microbiome and the severity of seborrheic dermatitis.**



**These results are supported by clinical observations based on a case series showing improvement in seborrheic dermatitis lesions after modulation of gut microbiota by Deniplant nutraceuticals**

**Food choices can affect microbiome composition and improve the severity grade of seborrheic dermatitis.**



Laboratorul de analize medicale  
Centrul de Biomedicină



## Patient with seborrheic dermatitis



Laboratorul de analize medicale  
Centrul de Biomedicină



**Because Deniplant treatment addresses the internal causes that trigger and maintain the disease, without ointments or other medications, its duration depends on how quickly the body resolves dysbiosis of the intestinal microbiome, and can be between 4-6 months.**

**If the disease is older, the treatment can exceed 12 months.**

**After all the lesions healed, there were patients who never had seborrheic dermatitis again, but there were also patients whose disease reappeared after 10-15 years.**



## Conclusion

**Unfortunately, the direct link between the skin microbiota and the pathogenesis of seborrheic dermatitis remains to be clearly established.**

**The treatment of seborrheic dermatitis, similar to other immune-mediated complex diseases, is limited to improving the symptoms, due to the lack of effective therapy.**

**On the basis of these findings, the treatment of skin inflammation by nutraceuticals is favored, since its therapeutic management is simple, safe, and cheap.**



## References

- Tao R, Li R, Wang R · Skin microbiome alterations in seborrheic dermatitis and dandruff: A systematic review. *Exp Dermatol.* 2021; 30(10): 1546-53.**
- Ferček I, Lugović-Mihić L, Tambić-Andrašević A, et al. Features of the Skin Microbiota in Common Inflammatory Skin Diseases. *Life (Basel).* 2021; 11(9): 962.**
- Chen P, He G, Qian J, et al. Potential role of the skin microbiota in Inflammatory skin diseases. *J. Cosmet. Dermatol.* 2021; 20: 400-9.**
- Byrd AL, Belkaid Y, Segre JA The human skin microbiome. *Nat. Rev. Microbiol.* 2018; 16: 143-55.**
- Palamaras I, Kyriakis K, Stavrianeas N. Seborrheic dermatitis: Lifetime detection rates. *J. Eur. Acad. Dermatol. Venereol.* 2011; 26: 524-6.**
- Vorapreechapanich A, Thammahong A, Chatsuwan T, et al. Perturbations in the skin microbiome of infantile and adult seborrheic dermatitis and new treatment options based on restoring a healthy skin microbiome. *Int J Dermatol.* 2024 Nov 11.**
- Campos Paulino L New perspectives on dandruff and seborrheic dermatitis: lessons we learned from bacterial and fungal skin microbiota. *Eur J Dermatol.* 2017; 27(S1): 4-7.**
- Ellis SR, Nguyen M, Vaughn AR, et al. The Skin and Gut Microbiome and Its Role in Common Dermatologic Conditions. *Microorganisms.* 2019; 7(11): 550.**

