A PRACTICAL APPROACH TO THE MANAGEMENT OF PSORIATIC DISEASE IN CHILDHOOD

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4% of all skin conditions diagnosed in children under 16 years are attributed to psoriasis.

Psoriasis begins in childhood in one-third of the cases.

Children suffering from psoriasis have a higher prevalence of obesity, diabetes mellitus, hypertension, juvenile arthritis, Crohn's disease, and psychiatric disorders.

Most of the medications approved for adult psoriasis can be used in children as well.

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

When psoriasis starts in childhood, it has more adverse implications.

The overall prevalence in the pediatric population is about 1%.

Diagnosis of psoriasis in the pediatric population is more challenging when compared to the well-delineated adult psoriasis.

Many treatment options approved for adults have not been studied in children.

The understanding of the relationship between microbiota and psoriasis may lead to diagnostics and treatment improvements.

Diet appears to play an important role in modulating disease activity, perhaps by influencing gut microbes.

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

It is known that also calorie restriction and low calorie diet can improve the symptomatology and the development of psoriasis.

Correct food choices may have a crucial role in the pathogenesis of psoriasis.

Life-style and dietary habits might be related to the incidence and severity of psoriasis in childs.

There is much evidence that alterations in the skin and intestinal microbiome play an important role in the pathogenesis of psoriasis.

The treatment of psoriatic 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 psoriasis in childs.

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

Preclinical investigations provide evidence for the role of the gut microbiome in psoriasis pathogenesis in childs.

The dysregulated skin microbiota may become a novel therapeutic target in psoriatic childs.

Psoriasis is a common skin disease, with chronic inflammation and a complex etiology.

Notably, the pathogenesis of psoriasis in childs, similar to other immune-associated skin diseases, is based on close interactions between components of the adaptive and the innate immune systems.

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

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

It has long been recognized that chronic skin conditions and mental health disorders are often co-morbid.

The concept of the gut-brain-skin axis emphasized in mental health disorders may also regulate the health of skin in childs.

Notably, preliminary experiments found that oral consumption of probiotics improves the clinical symptoms in childs with psoriasis, perhaps by altering the composition of intestinal microbiota leading to changes in neurotransmitter levels.

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

Like the skin microbiota, the composition of the gut microbiota and its association with psoriasis childs are unclear.

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 in childs.

The concept of the brain-gut-microbiome was supported by preclinical studies published during the past decade.

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

Microbiome-mediated interventions could be designed to manipulate these targets for the treatment of psoriasis in childs.

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

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

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

40 years ago, Gheorghe Giurgiu being a patient with psoriasis, to cure himself, he discovered a combination of medicinal plants that proved to be the only way to act on the internal causes that trigger and maintain this disease.

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

Some of the plants used grow them personally, others are of spontaneous flora.

Watching how the bees visit the flowers of the plants, Gheorghe Giurgiu thought to use in addition to honey and pollen, propolis and other bee-keeping products (cinnamon sticks, pods).

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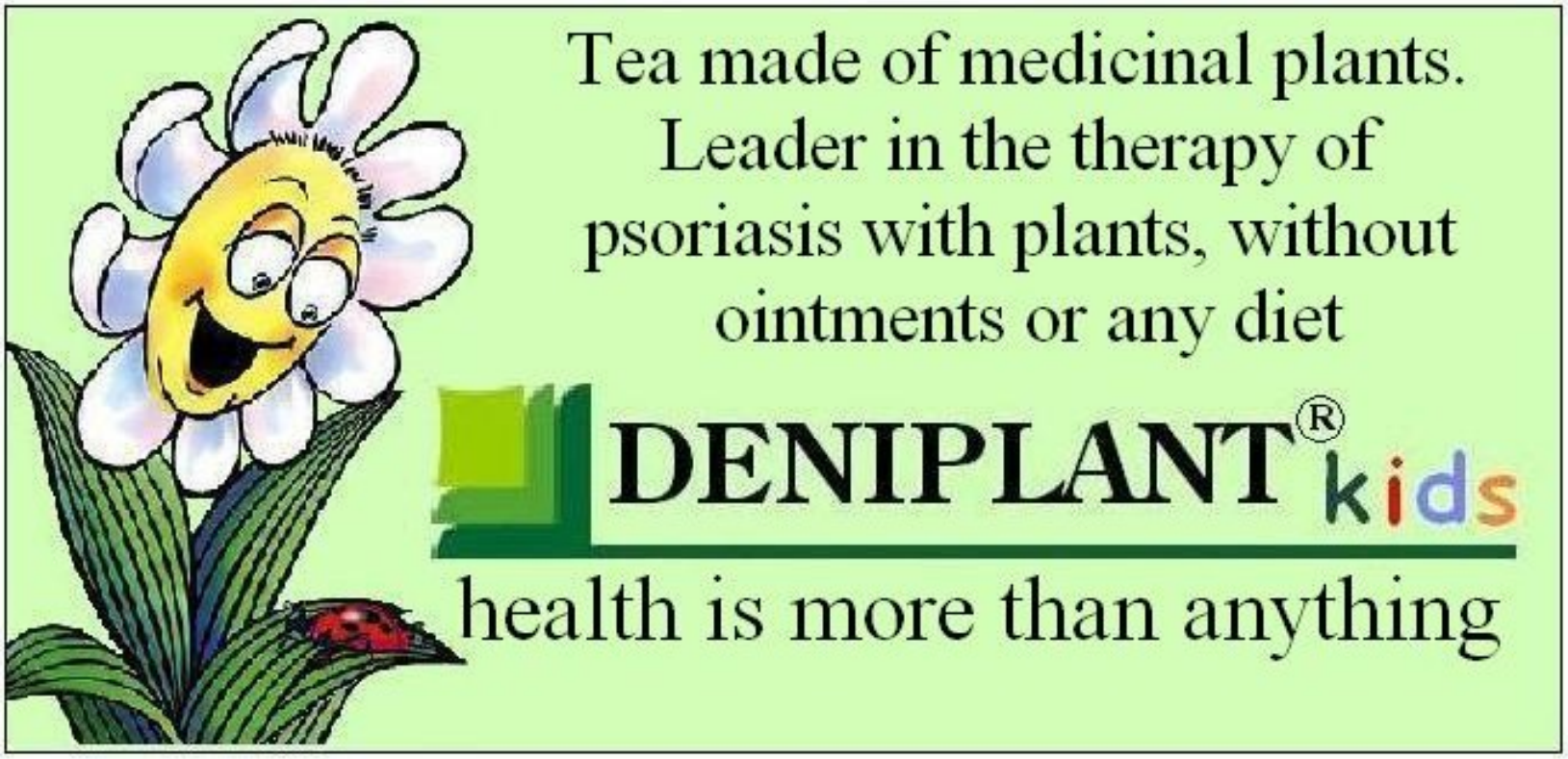

Conclusion

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

The treatment of psoriasis, 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.

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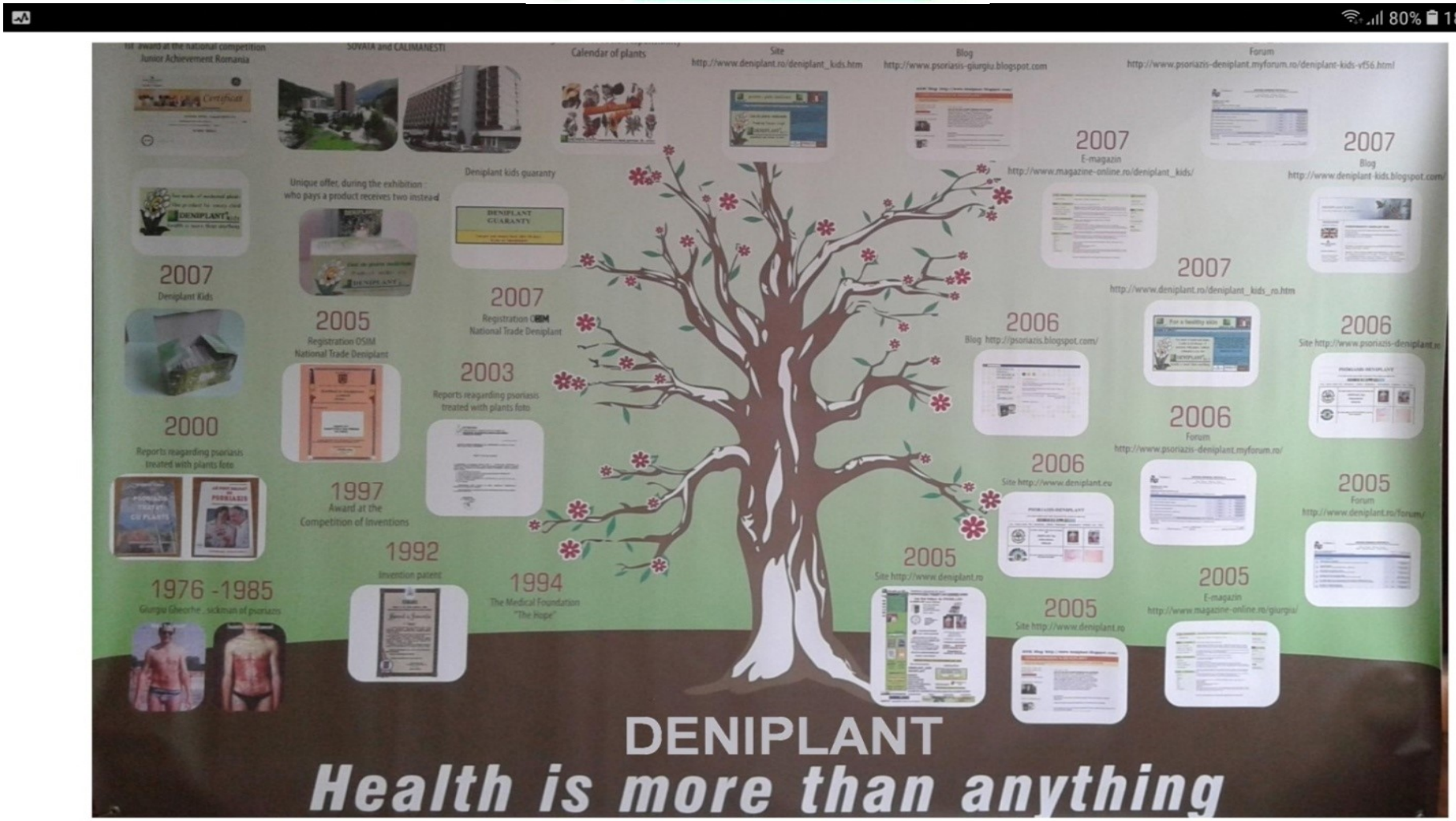

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