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The role of sphingolipids in the pathogenesis of psoriasis

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ABSTRACT

Psoriasis is complexed, chronic, immunologically mediated disease, which involves skin and joints. Psoriasis is commonly connected with numerous other diseases such as liver diseases, metabolic syndrome, impaired glucose tolerance, diabetes mellitus, atherosclerosis, hypertension, ischemic heart disease. Interestingly, comorbidities of psoriasis are attention-grabbing issue, additionally it can cause impairment of quality of life and may be associated with depressive disorders. Altered levels of ceramides in psoriatic skin, may lead to an anti-apoptotic and pro-proliferative states, consequently conducting to over-proliferation of keratinocytes and the development of skin lesions. Pathophysiology of psoriasis and its comorbidities is not fully understood yet. Sphingolipids, including ceramides, and their disturbed metabolism, may be the link between psoriasis and its comorbidities. Overall, the goal of this review was to discuss the role of sphingolipid disturbances in psoriasis and its comorbidities. PubMed was searched from February to the beginning of the May 2022. The systematic review included 73 eligible original articles.

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1 Bocheńska, K.; Gabig-Cimińska M. Unbalanced Sphingolipid Metabolism and Its Implications for the Pathogenesis of Psoriasis. Molecules. 2020 Mar 3;25(5):1130. doi: 10.3390/molecules25051130. 2 Gendrisch, F.; Nováčková, A.; Sochorová , M.; Haarhaus B.; Vávrová, K.; Schempp, CM.; Wölfle, U. Gentiana lutea Extract Modulates Ceramide Synthesis in Primary and Psoriasis-Like

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KEYWORDS

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