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PSORIASIS

## NEW PERSPECTIVES ON PSORIASIS, INTERLEUKINS AND CURCUMIN

E. Niculet<sup>(1)</sup> - A.I. Tatu<sup>(1)</sup>

"dunarea De Jos" University, Dermatology, Galati, Romania<sup>(1)</sup>

Background: Psoriasis, a multisystem autoimmune disorder that chronically involves the skin, joints, entheses and uvea, has a complex pathogenesis with a strong link between CD4+, CD8+ T lymphocytes, dendritic cells and a number of inflammatory molecules such as: IL-6, IL-8, IL-17, IL-20, IL-23, TNF- $\alpha$ . Due to these interactions and genetic susceptibility, the keratinocyte proliferation and polymorphous inflammatory infiltrate (localized in the dermis and epidermis) evolve, leading to the erythematous plaques seen macroscopically.

Observation: Newer and better treatments are a must, the current ones presenting many adverse effects. Turning once again to nature, curcumin - a widely used spice and a natural, non-toxic antioxidant with a multitude of biological properties (anti-inflammatory, anticarcinogenic, antifibrotic, antiviral, antiulcer, etc.) has been in the spotlight of numerous studies, both on murine models and on human subjects. Curcumin inhibits a large number of molecules such as elastase, nitric oxide, phospholipase, leukotrienes, prostaglandins, collagenase, hyaluronidase, tumor necrosis factor, interferon-inducible protein, and interleukins 6, 12, 17, 22, 23. This agent is used topically or systemically alone or alongside conventional medicine.

Key message: The current review emphasizes the inflammatory-anti-inflammatory axis of psoriasis and curcumin and the therapeutic role of this biological agent in studies carried out on psoriasis-suffering patients and those on imiquimod-induced psoriasis-type dermatitis in mouse models. After clinical observations and histopathological examinations of psoriatic cutaneous specimens, the conclusions drawn were overall inciteful, as curcumin downregulates the psoriatic-type inflammation, has rare to no side effects and it has evolved into a main target in treatments to come.





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