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PSORIASIS

## THE EXPRESSION OF SYNDECAN-1 IN PSORIATIC EPIDERMIS BEFORE AND AFTER PHOTOTHERAPY

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Introduction: Psoriasis is a chronic inflammatory, immune mediated disease affects primarily the skin and/or joints and is characterized by keratinocyte hyperproliferation.

It is likely that an intrinsic alteration in epidermal keratinocytes plays a very important role in disease expression.

Syndecan-1 is a membrane heparan sulfate proteoglycan expressed over the entire surface of the keratinocyte, involved in numerous processes such as cellular growth, differentiation, proliferation, adhesion, inflammation, wound healing and migration among others.

Narrow-band UVB radiation (NB-UVB) therapy offers a well-established treatment modality for psoriasis. However, despite the common use of this form of treatment, the mechanism of action of NB-UVB in psoriasis is not well understood.

Objectives: This study was done to clarify the role of syndecan-1 in the pathogenesis of Psoriasis vulgaris and to detect the effect of narrow band (UVB 311) on their tissue level.

Materials and Methods: The study included 20 psoriatic patients, and 20 healthy volunteers serving as control group. All patients received 36 sessions of phototherapy (in the form of NB-UVB). Skin biopsies were examined for Syndecan-1 using RT-PCR before and after phototherapy.

Results: A Significant reduction of the level of syndecan-1 after treatment with NB-UVB. A moderate negative correlation between the Expression of Syndecan-1 in Psoriatic Epidermis before Phototherapy and Psoriasis Areas and Severity Index (PASI) was found.

Conclusions: Syndecan-1 may play a role in the pathogenesis of psoriasis. Moreover, the significant decrease in its level after

treatment with NB-UVB may be one of the therapeutic mechanisms of NB-UVB in psoriasis.





