The Treatment of Patients Suffering from Herpetic Keratitis with Poly I: C and IDU

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Abstract

13 patients with keratitis punctata, keratitis herpetica and herpetic corneal ulcers were treated with daily instillations of 4 × poly I:C and 4 × IDU. In general the course of the corneal abnormalities, which was documented very carefully photographically, was favourable. The deep ulcers, which are often resistant against IDU treatment, responded particularly well to the therapy. However, a more extensive investigation is needed to confirm these preliminary results.

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Discussion

Leeman: Why didn’t you include in the poly I:C treated animals also a group in which the poly I:C treatment was not started until several days after the infection with herpes simplex virus?
Oosterhuis: Experimental work of other authors has shown that the therapeutic effect of Poly I:C is less effective in treating herpetic keratitis as the therapy is started a longer period after grafting the virus and the onset of the keratitis.

Van Buster veld: In stromal extension of herpes, cellular infiltrations are often found in the stroma. These cells belong to the lymphoid series. Poly I:C stimulates, apart from the interferon production, also the transformation of the immuno-competent cell to the immunoactive cell, which plays a role in the defense against viruses. What happens with these stromal infiltrates after treatment with poly I:C?
Oosterhuis: The stromal infiltrates react well to treatment with Poly I:C.
Whereas IDU by its slight penetration mainly acts on the corneal surface, Poly I:C penetrates more deeply, thus also causing deeply seated keratitis in the corneal stroma to react to the therapy.

De Jong: Why was IDU instilled only 4 dd in the keratitis dendritica?
Oosterhuis: The IDU was instilled only four times a day being the only way to enable the therapy to be continued for several weeks without creating dystrophy of the corneal epithelium.

Von Winning: Were the cases of keratitis punctata all of the herpetic origin?
Oosterhuis: Yes.