Stimulation of the Proliferation of Human Dermal Fibroblasts *in Vitro* by a Lipidocolloid Dressing

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Message:

This study evaluated the effect of Urgotul™ on normal human dermal fibroblast proliferation in vitro and compared the effect with that of two other dressings: Mepitel® and Tulle Gras® petrolatum dressing.

Methods:

Proliferation was measured by the extent of thymidine incorporation into the replicating DNA of proliferative fibroblasts in contact with the complete dressing. Additional cell viability and metabolism were evaluated using MTT assay. Morphology and ultrastructure analysis were based on immuno-labelling and confocal microscopy.

Results:

Only Urgotul significantly stimulated thymidine incorporation, generally with a maximal proliferative effect at a contact time of 48 hours. This was confirmed by the observation of a greater number of dividing cells (mitotic cells) than in the control cultures. No toxicity was observed following treatment with Urgotul dressing.

Conclusions:

Fibroblasts play a key role in dermal wound repair. The ability of Urgotul to promote fibroblast proliferation helps to explain its efficiency in the healing process of acute and chronic wounds.

Author's References:
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