〈原　著〉

ヘマトポルフィリン—UVA増感による3次元培養細胞（Skin^2）中の過酸化脂質含量への影響

内野　正*，徳永　裕司*，安藤　正典*

Effect of Hematoporphyrin — UVA Sensitization on Content of Hydroperoxides in Three-Dimensional Cultured Cells (Skin^2)

Tadashi UCHINO,* Hiroshi TOKUNAGA,* Masanori ANDO*

Abstract

To examine biological effects of UVA, three-dimensional cultured cells (Skin^2) were irradiated by UVA (350－380 nm) with hematoporphyrin (HP) as photosensitizer and were investigated effects of UVA-sensitization on cytotoxicity and contents of both squalene monohydroperoxide (SQOOH) and 2-thiobarbituric acid reactive substances (TBA-RS) in Skin^2 tissue. In the absence of HP, significant increase of cytotoxicity against the Skin^2, SQOOH and TBA-RS contents were not observed, but in the presence of HP, they were observed depending on HP concentrations. These results suggested that TBA-RS including SQOOH might be concerned with the cytotoxicity of Skin^2 on irradiating of UVA in the presence of HP.

Key words: UVA, Skin^2, hematoporphyrin, squalene monohydroperoxide, CL-HPLC.