

论著

亲环素A和CD147在皮肤衰老过程中表达的研究

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摘要:

目的: 检测不同年龄组正常人避光部位及曝光部位表皮组织中亲环素A(CyPA)和CD147的表达, 初步探讨CyPA和CD147在皮肤衰老过程中的意义。方法: 收集少年组(<15岁)、中年组(30-40岁)和老年组(>65岁)避光部位和曝光部位正常皮肤各20例, 运用免疫组织化学及原位杂交2种方法检测表皮中CyPA和CD147蛋白和mRNA的表达水平, 并分析各年龄组CyPA和CD147的表达水平的差异及相关性。结果: 免疫组织化学结果显示CyPA和CD147 2种蛋白在曝光和避光部位都为老年组最高, 中年组次之, 少年组最低, 各组间差异具有统计学意义(均 $P < 0.05$), 且各组中CyPA和CD147表达呈正相关(避光部位 $r=0.899$, 曝光部位 $r=0.945$)。组织原位杂交结果显示CyPA和CD147 mRNA在曝光和避光部位都为老年组最高, 中年组次之, 少年组最低, 各组间差异具有统计学意义(均 $P < 0.05$), 且各组中CyPA和CD147表达呈正相关(避光部位 $r=0.792$, 曝光部位 $r=0.782$)。结论: CyPA和CD147相互作用可能在皮肤衰老过程中起重要作用。

关键词: 亲环素A; CD147; 皮肤衰老

Expression of cyclophilin A and CD147 during skin aging

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Abstract:

Objective To investigate the role of cyclophilin A (CypA) and CD147 in the process of skin aging. Methods Twenty cases of tissue samples from junior group (<15 years old), middle age group (30-40 years old) or old age group (>65 years old) were collected from photophobic and exposal parts of skin, respectively. Immunohistochemistry (IHC) and in situ hybridization (ISH) were carried out to semi-quantitatively detect the expression level of CyPA and CD147. Results IHC demonstrated that both CyPA and CD147 were expressed in both photophobic and exposal parts of normal human skin in all 3 groups. The expression levels of both CyPA and CD147 were increased with increase in age. There were significant differences in both CyPA and CD147 expression among 3 groups ($P < 0.05$). CyPA and CD147 were also positively correlated in all 3 groups. Similar results were achieved by ISH. Conclusion The interaction between CD147 and CyPA might play an important role in the process of skin aging.

Keywords: CyPA; CD147; skin aging

收稿日期 2010-10-25 修回日期 网络版发布日期

DOI: 10.3969/j.issn.1672-7347.2011.

基金项目:

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