Analysis of the expression of apoptosis regulation gene and immune regulation gene in cutaneous basal cell carcinoma

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[Foundation Project]: Scientific research and developmental project of Shiyan city (grant No. 2009 s06)

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Received: 2014-11-17 Revised: 2014-11-24

JHMC, 2015; 21(2): 247-249

View from specialist: It is creative, and of certain scientific and educational value.

[ABSTRACT] Objective: To investigate the expression of apoptosis regulation gene and immune regulation gene in cutaneous basal cell carcinoma. Methods: A total of 40 cutaneous basal cell carcinoma patients admitted to our hospital were enrolled, tumor tissue in lesions and normal skin around lesion were collected. Then the expression of Caspase-3, p33ING1b, Bax, Survivin, Bcl-2, p53, TLR7, AP-1, MyD88 were assayed by the method of real-time PCR and Western-blot. Results: (1) Pro-apoptotic gene: mRNA and protein content of Caspase-3, p33ING1b, Bax in tumor tissue were lower than those of normal skin tissue (P<0.05); (2) Anti-apoptosis gene: mutant p53 gene, Survivin, Bcl-2 mRNA and protein contents in tumor tissue were higher than those of normal skin tissue; (3) Immune regulation gene: TLR7, AP-1, MyD88 in tumor tissue were higher than those of normal skin tissue. Conclusion: Apoptosis regulation gene and immune regulation gene are abnormally expressed in cutaneous basal cell carcinoma; apoptosis gene is expression is decreased and expression of anti-apoptosis gene, immune regulation genes is increased.

[KEY WORDS] Basal cell carcinoma; Apoptosis regulation gene; Immune regulation gene