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论著

DJ-1和HSP27在侵袭性与非侵袭性垂体腺瘤中的差异表达

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摘要:

目的: 研究垂体腺瘤中癌基因蛋白DJ-1、热休克蛋白27(HSP27)的表达是否与侵袭性相关。**方法**: 采用Western印迹法检测侵袭性与非侵袭性垂体腺瘤各20例组织中DJ-1和HSP27蛋白的表达,并分析DJ-1和HSP27蛋白水平与侵袭性的关系。**结果**: 20例侵袭性垂体腺瘤中DJ-1和HSP27蛋白表达的强阳性率分别为70%(14/20)和80%(16/20),20例非侵袭性垂体腺瘤中DJ-1和HSP27蛋白表达的强阳性率均为10%(2/20),侵袭性垂体腺瘤明显高于非侵袭性垂体腺瘤($P<0.05$)。DJ-1和HSP27的表达水平与垂体腺瘤侵袭性之间均呈正相关(分别$r=0.350$,$P<0.05$;$r=0.400$,$P<0.05$)。**结论**: DJ-1和HSP27在侵袭性垂体腺瘤中的异常表达可能在侵袭性垂体腺瘤的形成和发展中发挥重要作用,与垂体腺瘤的侵袭性密切相关。

关键词: 癌基因DJ-1蛋白 热休克蛋白27 垂体腺瘤 侵袭性 Western印迹

Differential expression of DJ-1 and HSP27 in invasive and non-invasive pituitary adenomas

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Abstract:

Objective: To explore whether oncogenes DJ-1 and HSP27 are associated with invasiveness of human pituitary adenoma. Methods: Total proteins were extracted from samples of 20 invasive and 20 non-invasive pituitary adenomas and the expression of DJ-1 and HSP27 was analyzed by Western blot. The correlation of DJ-1and HSP27 with the invasiveness of pituitary adenoma was analyzed. Results: The strong positive rates of DJ-1 and HSP27 in the 20 invasive pituitary adenoma were 70% (14/20) and 80% (16/20), respectively. The invasive group had significantly higher expression of DJ-1 and HSP27 proteins than the noninvasive group[10% (2/20), 10% (2/20), respectively]. There was a positive correlation between the expression of DJ-1, HSP27 proteins and the invasiveness of pituitary adenoma as judged by the Spearman rank correlation test ($P<0.05$). Conclusion: The proliferative activity and abnormal expression of oncogenes DJ-1 and HSP27 may play a significant role in tumorigenesis and progression of pituitary adenoma. There was a significant correlation between the expression of DJ-1 and HSP27 and the invasiveness of pituitary adenoma.

Keywords: oncogene DJ-1 HSP27 pituitary adenoma invasiveness Western blot

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