

# Geminin、Ki-67和HPV检测对早期宫颈上皮内瘤变的诊断价值

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**Title:** The diagnostic value of detection of Geminin,Ki-67 and HPV for early cervical intraepithelial neoplasia

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**关键词:** 宫颈上皮内瘤变; Geminin; Ki-67; HPV; 免疫组化

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**摘要:** 目的: 探讨Geminin、Ki-67和HPV检测对早期宫颈上皮内瘤变的诊断价值。方法:采用免疫组化SP法检测Geminin、Ki-67在126例宫颈上皮内瘤变(CIN)组织、50例慢性宫颈炎宫颈组织及30例正常宫颈组织中的表达; 采用HC2的方法检测HPV的载量。用Spearman秩相关分析Geminin、Ki-67分别与HPV感染的相关性。结果:Geminin、Ki-67在CIN组织中阳性表达率高于宫颈炎组和对照组( $P < 0.05$ )；Geminin、Ki-67在宫颈炎组和对照组中阳性表达率差异无统计学意义( $P > 0.05$ )；Geminin、Ki-67在CIN组织中阳性表达率CINIII组 > CINI组 > CINII组，组间比较差异有统计学意义( $P < 0.05$ )；HPV在宫颈病变组织中阳性表达率CINIII组 > CINII组 > CINI组 > 宫颈炎组 > 对照组，组间比较差异有统计学意义( $P < 0.05$ )；Geminin、Ki-67表达分别与HPV感染呈正相关( $P < 0.05$ )；Geminin、Ki-67和HPV联合检测的特异度和精确度最高。结论:不同CIN分期病变组织Geminin、Ki-67表达水平和HPV感染率差异较大，可通过HPV、Geminin、Ki-67联合检测对早期CIN进行辅助诊断。

**Abstract:** Objective: To explore the diagnostic value of detection of Geminin, Ki-67 and HPV for early cervical intraepithelial neoplasia. Methods: Immunohistochemical SP method was used to detect the expression of Geminin and Ki-67 in 126 cases of cervical intraepithelial neoplasia (CIN), 50 cases of chronic cervicitis, and 30 cases of normal cervical tissue. The HC2 method was used to detect the load of HPV. Using Spearman rank correlation analysed the correlation of the expression of Geminin, Ki-67 and HPV infection. Results: The positive expression rate of Geminin and Ki-67 in CIN tissues was higher than that in the cervicitis group and the control group ( $P < 0.05$ ). There was no significant difference in the positive rate of Geminin and Ki-67 in the cervicitis group and the control group ( $P > 0.05$ ). The positive rate of Geminin and Ki-67 in CIN tissues was CINIII group > CINII group > CINI group, and there was a significant difference between groups ( $P < 0.05$ ). The positive expression rate of HPV in cervical lesions was CINIII group > CINII group > CINI group > cervicitis group > control group, the difference in groups was statistically significant ( $P < 0.05$ ). The expression of Geminin and Ki-67 was positively correlated with HPV infection ( $P < 0.05$ ). The specificity and accuracy of the combined detection of Geminin, Ki-67 and HPV was the highest. Conclusion: The expression level of Geminin and Ki-67 and HPV infection rate in different CIN stage lesions are quite different. The early CIN can be diagnosed by combined detection of HPV, Geminin and Ki-67.

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**备注/Memo:** -

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