

Methylation of the *RASSF1A* gene promoter in Uigur women with cervical squamous cell carcinoma

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ABSTRACT

Aims and background. To explore the relationship between methylation in promoter region 2 of the Ras association domain family 1A (*RASSF1A*) gene and cervical squamous cell carcinoma (SCC) in Uigur women living in the Xinjiang province of China.

Methods and study design. Methylation-specific polymerase chain reaction (MSP) was used to analyze 40 normal cervical epithelium samples and 65 cervical squamous cell carcinoma samples from Uigur women.

Results. We found methylation in promoter region 2 of *RASSF1A* in 13 of the 65 cervical squamous cell carcinoma samples (20%), but not in any of the 40 normal cervical epithelium tissues. In addition, there was methylation in 7 of 46 patients with no lymph node metastases and in 6 of 19 patients with lymph node metastases.

Conclusions. Our results indicate that methylation in the promoter region 2 of *RASSF1A* is likely associated with tumorigenesis of cervical squamous cell carcinoma in Uigur women. However, such methylation does not appear to be significantly associated with lymph node metastasis in this patient population.

Key words: cervical squamous cell carcinoma, *RASSF1A* tumor suppressor gene, CpG island methylation.

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