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P53 GENE MUTATIONS IN SURGICAL MARGINS AND PRIMARY TUMOR TISSUES OF PATIENTS WITH SQUAMOUS CELL CARCINOMA OF THE HEAD AND NECK

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Aims and background: **The frequency of *p53* mutations in primary tumors, the effect of the mutations on some clinical and pathological features of head and neck squamous cell carcinoma, and the impact of p53 mutations in the surgical margins on local recurrence were determined.**
Material and methods: **We investigated the presence of *p53* mutations in primary tumor samples and in the surgical margins of 34 patients with head and neck cancer using single strand conformational polymorphism and sequencing analysis.**
Results: **The *p53* mutations (codons 175addAT, 175delGC, 206G→A, and 248delC) were found in the primary tumor samples of 15 of 34 patients (44.12%) and in the surgical margins of 5 of the 15 tumors (33.33%) with *p53* mutations.**
Conclusions: **We found no statistically significant association between the presence of *p53* mutations in the primary tumor, the clinical and pathological features, or outcome of head and neck squamous cell carcinoma in this study. Furthermore, the presence of *p53* mutations in the surgical margins may not increase the risk of local-regional recurrence, but probably increases the risk of developing distant metastases or second primary tumors.**

Key words: *p53* gene, single strand conformational polymorphism analysis, squamous cell carcinoma of head and neck, surgical margins, tumor sample.

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