



ASSESSMENT OF KRAS LCS6 MUTATION WITH ENDOMETRIAL CANCER

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Context: Genetic predisposition in endometrial cancer is an interesting subject.

Objective: KRAS mutation is correlated with endometrial hyperplasia and carcinoma. LCS6(let 7 complemter site) polymorphism in 3'UTR (untranslated region) of KRAS gene which up-regulates KRAS expression is observed 5.8% in general population, while its prevalence is 16.5% in endometrial cancer patients. The aim of this study was to evaluate KRAS LCS6 polymorphism prevalence and its association with clinical characteristics of the disease.

Methods: The association of the KRAS polymorphism with endometrial cancer risk was evaluated by case-control analysis of endometrial cancer patients and controls.

Patients: Hysterectomy performed 105 patients for other gynecologic indications (group 1) and 108 patients for endometrial cancer with type 1 or type 2 (group 2) were included in the study.

Intervention: DNA was isolated from blood samples of patients who were screened for KRAS LCS6 polymorphism.

Main Outcome: Patients with endometrial cancer were classified according to histological features, carcinoma stage, tumor diameter, myometrial invasion, lymphovascular invasion and positive lymph nodes. We aim to evaluate the relationship between KRAS polymorphism and clinical features of endometrial cancer.

Measures: In the comparing the obtained data, Chi-square analysis, Mann-Whitney U test, Kruskal-Wallis H test were used. The results were evaluated at $p < 0.05$ significance level.

Results: No significant difference for age, parity, and body mass index criteria were found between two groups. KRAS LCS6 polymorphism was found 16.6% in group 2 and 12.4% in group 1. Although it was enriched 22.2% in type 2 endometrial cancer ($p:0.609$) there was no correlation between LCS6 polymorphism and histopathological features.

Conclusions: While KRAS LCS6 polymorphism of the KRAS gene is more frequent in our cohort of patients than general population it is not associated with endometrial cancer and histopathologic features of the disease.

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