

model, revealing inhibition of tumor node. SEG like other b-1,3-glucans is perspective in treatment and prevention of tumor development as host defense modifiers

Conclusion: We can conclude that cathepsins B and L and aspartic protease cathepsin D are biomarkers of murine tumor development and SEG is perspective in prevention and therapy of murine tumors as immunomodulator, host defence modifier.

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Epidemiology/Screening

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Serial cytological assay of buccal exfoliated cells as technology for mass screening of individuals with risk of oral cancer for monitoring and cancer prevention

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The analytical epidemiology associated oral cancer with long-term smoking tobacco and drinking alcohol and exposure to various carcinogens. The aim of our study was to investigate the state of distant oral mucosa in patients with oral squamous cell carcinoma (SCCs) and in patients with risk of oral cancer that depends on age, social-demographic parameters, smoking-drinking status, clinical stage, tumor stage, DNA content, p53 expression, serum levels of VEGF. Buccal scrapes, biopsy specimens of tumors and squamous epithelium in tumor-distant mucosa were taken from 30 patients with SCCs. Buccal scrapes of patients with risk of oral cancer were studied in 20 volunteers living in the 5 km area from Rivne NPS. Buccal scrapes from 10 volunteers (age 19 years, nonsmoking, no drinking) were used as controls. Buccal scrapes were stained by Pap with some modification by Rudenko. Cytological changes in buccal mucosa were estimated by the dimension of nucleus, the structure of chromatin, the colouring of cytoplasm of epitheliocytes and differentiation index. DNA content was analyzed using Feulgen staining. P53 staining was performed with monoclonal anti-p53 antibody. Serum levels of VEGF (ng/ml) were measured by an enzyme immunoassay. The analysis of the buccal epithelium and tumor-distant mucosa epithelium showed, that normal epithelium was not detected in patients with SCCs. Progression of the histopathological phenotype in buccal and tumor-distant mucosa depended on clinical stages, p53 status and serum levels of VEGF. Similar alterations in differentiation and maturation of epitheliocytes, significant decrease of differentiation index, and transition to hyperplastic and dysplastic epithelium were revealed in buccal epithelium scrapes from both patients with SCCs and patients with risk of oral cancer. It was concluded, that oral tumorigenesis in men from Ukrainian population has not been correlated strongly with long-term smoking. Revealed similar alterations in buccal epithelium may be used in serial cytological assay of exfoliated cells for screening of individuals with risk of oral cancer. This technique is easy reproducible, economical and non-invasive.

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Participation rate and related socio-demographic factors in the National Cancer Screening Program

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Background: Cancer is the leading cause of death and one of the largest burdens of disease in Korea. In 1996, the 'Ten year Plan for Cancer Control' was formulated and the government then adopted the plan as a national policy. As part of this plan, the National Cancer Screening Program (NCSP) for Medicaid recipients was formulated, and the government adapted this in 1999. For low-income beneficiaries of the National Health Insurance Corporation (NHIC), the screening program has been in place since 2002. In 2002, the target cancers of NCSP were stomach, breast and cervical cancer. This study was conducted to examine the relationships between the participation rate, the abnormal screening rate and the socio-demographic factors associated with participation in the screening program.

Methods: To analyze the participation rate and abnormal rate for the NCSP, we used the 2002 NCSP records. The information on the socio-demographic factors was available from the database of the beneficiaries in the NHIC and Medicaid.

Results: The participation rate of the Medicaid beneficiaries for the stomach, breast and cervical cancer screening were 9.2%, 15.5% and 15.0%, respectively, and 11.3% and 12.5%, except cervical cancer which wasn't be included in the NCSP, for the beneficiaries of the NHIC. The abnormal rate of stomach, breast and cervical cancer screening were 25.7%, 11.2% and 21.0%, respectively, for the beneficiaries of Medicaid and 42.6% and 19.4% for the beneficiaries of the NHIC. On the multiple logistic regression analysis, gender, age and place of residence were significantly associated with participation rates of the NCSP. For stomach cancer, women participated in the NCSP more than men. The participation rate was higher among people in their fifties and sixties than for those people in their forties and those people over seventy years in age. For the breast and cervical cancer, people in their fifties were more likely to participate in the NCSP than people in their forties and people over sixty. For the place of residence, people in the rural areas participated more than those people in any other places.

Conclusion: The above results show that the participation rate and abnormal rate were significantly associated with the socio-demographic factors. To improve the participation rate for the NCSP, more attention should be given to the underserved groups.