

age at first delivery etc.) and symptoms for breast cancer. The model was based on data of two main groups (group of women with breast cancer and the control - healthy group). The verification of the model performed on set of 100 test patterns. Accuracy of identification of high-risk group was 98%.

Conclusion: Advantage of this model is quick and easy identification of women with high risk for breast cancer enabling individually tailored prevention of the disease.

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A case-control study on the role of blood group and family history in developing gastric cancer before the age of 50

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Introduction: Development of gastric cancer (GC) before 50 is likely to have a genetic basis. Blood group A has been shown as a risk factor for GC. Some parts of Iran are endemic regions for GC.

Aims & methods: In this prospective case-control study, we enrolled Iranian gastric cancer patients under the age of 50 and sex-matched controls over 50. All the patients and (if alive) or their family members were interviewed and their pedigrees were drawn. The blood group of the patients were also tested or obtained from the in-patients records.

Results: 54 cases (mean age: 37.1, 18-49; m/f=1) under 50 years old and 54 sex-matched controls (mean age: 68.2, 50-88) were enrolled in the study. 40.7% of the study group were dead and 59.3% were alive at time of study. Distribution of blood groups is as follow: 68.6% O, 13% A, 13% B and 5.4% AB in cases and 27.7%, 63%, 6.5% and 2.7% in controls, respectively. 50% of the cases and 9% of controls had some first or second-degree relatives with gastric or other types of cancers ($p < 0.01$). Breast, lung, gynecological and hematological malignancies constituted other type of cancer in their families.

Conclusion: It seems that gastric cancer before 50 is accompanied with a familial aggregation. Interestingly, our study shows the significant correlation between blood group O and the development of gastric cancer under 50. This arises the need for more linkage analysis study on the role of blood group genetic area in familial aggregation of gastric cancer.

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The role of clinico-genetic monitoring of risk groups for early diagnostics of female reproductive system tumors

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The oncoepidemiologic situation in Ukraine is marked by the continuous increase of female reproductive system tumors. More than 50% of the new diagnosed cases depend on the influence of external and internal factors. The risk of developing the similar disease in healthy relatives (mother, sister, daughter) of the patients with cancer is about 50%. We performed clinical

and genealogical analysis of 513 healthy women, 44% of them had relatives with benign and malignant tumors. Clinical and genealogical analysis, performed in 520 probands with ovarian cancer revealed 34 families with 2 or more relatives suffering from cancer (6.54%). 81 patients with ovarian cancer had 1 close relative with tumors (15.57%). The similar analysis was conducted in genealogies of 482 probands with endometrial cancer. It revealed 13 families with 2 or more relatives suffering from cancer (2.69%). 49 patients with endometrial cancer had 1 close relative with tumors (10.2%). Frequently the relatives of patients with ovarian and endometrial cancers suffered from tumors of female reproductive sphere combined with gut tumors. We examined 110 close relatives of patients with ovarian and endometrial cancer who had an increased risk of developing tumors. Only 19 women manifested with the female reproductive system disorders at the time of their first consultation. The other 91 women were practically healthy. It should be stressed that the risk of developing cancer was 52-54% in the examined women. During a 3-year follow-up of these patients we diagnosed benign tumors, precancerous diseases of female reproductive system and the disorders that were unfavorable for tumor development: myoma of the uterus – 8, ovarian cysts and cystomas – 7, nodular and diffuse mastopathies – 29, tuboovarian tumors – 5, endometrial hyperplasia – 9, chronic adnexitis – 11. This approach is effective because it became possible to diagnose ovarian and endometrial cancers 4 women of the group with the increased genetic risk quite early (sisters of the probands with ovarian cancer – highly differentiated endometrial adenocarcinoma IIa; daughter of the proband with ovarian cancer – serose ovarian cystadenocarcinoma Ib; sister of the proband with endometrial cancer – ovarian cystadenocarcinoma D). The suggested approach to the prevention and early diagnostic of female reproductive system tumors has clinical and social benefits. It could be recommended as a model to the creation of the system of the oncogenetic help to the population.

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The dependence of VEGF level from characteristics of Lewis lung carcinoma development in C57BL6 mice

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Targeting angiogenesis represents a new strategy for the development of cancer prevention. Angiogenesis, or new blood vessel growth from an existing vasculature, expression of vascular endothelial cell growth factor (VEGF), has become a very promising target for experimental therapies in cancer. The aim of the study was to investigate dependence of VEGF level from characteristics of Lewis lung carcinoma (LLC) development in C57BL6 mice for the use in perspective as experimental model for the screening new antiangiogenic agents. LLC transplantation was performed by injection i.m. of 0.02 ml of the tumor cell suspension of 2×10^5 cells. For monitoring of the primary tumor, the levels of tumor dissemination, the tumor volumes (VT, mm³), the number and volumes of the lung metastasis (VLM, mm³), and VEGF levels in serum were estimated.