

GENDER DIFFERENCES OF GDV-BIOELEKTROGRAMS PARAMETERS OF STUDENTS

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To study the GDV-bioelektrogramms depending on the gender, medical students were surveyed by the apparatus “BEO GDV Camera” with filter (F) and without it (wF). It was revealed, that while surveying wF, normalized luminescence area of the girls is higher than that of boys (1.556 ± 0.065 vs. 1.222 ± 0.064 ($p = 0.0003$)). The average emission intensity of the luminescence of the GDV-grams, in contrast, was higher in boys and was 41.67 ± 0.579 vs. 39.64 ± 0.460 ($p = 0.006$) in girls. GDV-grams of boys were characterized by more indented luminescence contour, as a result had higher values of form coefficient (33.33 ± 0.954) and fractality of isoline (1.900 ± 0.004) and low — of medium radius of isoline (7.160 ± 0.292). Entropy of isoline was higher in the group of girls and was 1.712 ± 0.023 vs. 1.537 ± 0.032 ($p = 0.00001$) in the group of boys. When surveying with the F, remained above trend in the distribution of normalized luminescence area, average emission intensity, form coefficient. However, the entropy of isoline, fractality of isoline and the medium radius of isoline were non-significant differences. Probably, the first three parameters are more resistant to the type of vegetative regulation, caused by gender-specific features, while the entropy of isoline, fractality of isoline and the medium radius of isoline are most susceptible to it.

ОСОБЕННОСТИ АНТИМУТАГЕННОГО ЭФФЕКТА «МЕЛАКСЕНА»

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В работе исследовали цитогенетический эффект препарата «Мелаксен» в культуре лимфоцитов периферической крови человека по методу Мурхеда. В исследованиях принимали участие 38 волонтеров, практически здоровых студентов СОГМА, составивших 2 группы, контрольную (19 человек) и экспериментальную (19 человек). В контрольной группе исследовали хромосомные aberrации (ХА), возникшие в результате спонтанного мутагенеза с интервалом в 7 суток. В экспериментальной группе — до приема «Мелаксена» и после приема 3 мг препарата (1 таблетка) за 30 мин. до сна в течение 7 суток. В результате исследования

средние значения в контрольной группе составили $1,3 \pm 0,28\%$ ХА. Через семь суток достоверных изменений в уровне спонтанных мутаций не выявлено — он составил 1,45% ХА. Во второй группе до воздействия «Мелаксена» средний процент генетических повреждений составил 1,41%, а после приема препарата уменьшился почти в 4 раза и составил в среднем 0,36%. В группе лиц, принимавших «Мелаксен», увеличилось количество лиц с самым низким уровнем ХА от 0 до 1% и составил 89,5%. Во всех вариантах эксперимента «Мелаксен» снижает процент ХА. Полученные нами результаты свидетельствуют о мощном антимуtagenном эффекте «Мелаксена», что позволяет рекомендовать препарат «Мелаксен» в дозе 3 мг в течение 7 суток и более за 30—40 минут перед сном, в качестве профилактического антимуtagenного средства в условиях роста концентрации экотоксикантов в окружающей среде.

PECULIARITIES ANTIMUTAGENOUS EFFECT OF “MELAXEN”

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The cytogenetic effect of the preparation “Melaxen” in the lymphocyte culture of Man peripheral blood was investigated according to the Murkhed method. 38 volunteers, practically healthy students of NOSMA, having composed 2 groups, the control (19 persons) and experimental (19 persons) took part in the research. The chromosomal aberrations (ChA), having arised as a result of spontaneous mutagenesis with the interval of 7 days, were investigated in the control group. In the experimental group-before the “Melaxen” reception and after the reception of 3 mg preparation (1 tab.) 30 minutes before the sleep during 7 days. Middle index in the control droup showed $1.3 \pm 0.28\%$ ChA as a result of investation. In 7 days the reliable changes in the spontaneous mutations level was not revealed-it composed 1.45% ChA. In the second group in the variants before “Melaxen” influence middle percentage of genetic lesions composed 1.41% and after the reception of the preparation-it decreased almost 4 times and composed at an average 0.36%. In the group of persons, having taken “Melaxen”, the number of persons with the lowest level of ChA from 0 till 1% increased and composed 89.5%. In all variants of the experiment “Melaxen” decreases ChA percentage. The obtained results show mighty antimutagenous effect of “Melaxen”. And it allows to recommend “Melaxen” preparation in the dose of 3 mg during 7 days and more 30—40 minutes before the sleep, as prophylactic antimutagenous agent under the conditions of the growth of ecotoxicants’ concentration in the environment.