## **ECOLOGY AND ALLERGIC PATHOLOGY OF NEWBORNS**

Shamova A.G., Stepanova A.N., Malanicheva T.G. Medical University of Kazan, Russia

Continuous study of 3000 children in the age of 0-14 years was carried. Studied children were the inhabitors of Kazan, with zones, differing in quantitative and qualitative air pollution characteristics. Air pollution degree was estimated on a conditional parameter  $P(P=\coprod E_i)$  which found to be 20.1 in the first, the most polluted zone; 14.8 in second, 8.2 in third, and 1.5 in control zone.

Generally the allergic pathology frequency among newborn was found to be  $62.7 \pm 3.4$  to 1000 of children's population, including  $69.4 \pm 3.4$  to 1000, among the boys, and  $61.0 \pm 3.4$  to 1000 among the girls (p < 0.05). In allergic pathology structure among the newborns the toxic erythema covers 62.7%, the exsudative-cattharal diatesis 19.9%, exema 12.9%, drug allergy 3.5%, and postvaccinal allergy -1%.

Among the factors of risk, promoting allergic reactivity changes' realization, it is necessary to note hereditary disorders by allergic diseases (r = 0.45), early mixed and artificial feeding (r = 0.42), the antenatal period's pathology, such as pregnancy toxicosis, mother's acute respiratory diseases, antibiotics administrations in pregnancy (r = 0.338), and also the use of antibacterial drugs in early neonatal period (r = 0.32).

Study of ecological hazards influence has shown, that allergic pathology frequency in newborns grows together with atmospheric air pollution P. In the first, the most polluted zone, it is equal to  $78.4 \pm 3.4$  to every 1000 of children's population, and only  $53.2 \pm 3.4$  to 1000 (p < 0.001) in the control zone. Probably, it is caused by intrauteral fetus's sensibilization by harmful air-pollutants complexes, that promotes the early allergic reactivity changes' realization.

## THE USE OF VARIABLE FREQUENT MODULATIONS FOR CORRECTION OF UROGENITAL DISTURBANCES AT WOMEN IN MENOPAUSAL PERIOD

Shangin A., Bezhenar V., Kira E.

Russian Military Medical Academy, St.- Petersburg, Russia

In perimenopausal period the most expressed changes occur in urogenital system. The frequency of urogenital disturbances at women of age 45-55 years reaches 50-70 %. As far as the most of these symptoms (vaginal dryness, dispareunia, itching, relapse of vaginal and urogenital infection, senile colpitis, urine stress incontinence, disuria) are in direct consequence with atrophic urogenital tract changes and essentially worsen patients' quality-of-life, the urogenital disturbances treatment in women in perimenopause is an urgent problem.

It is known, that the mechanical fluctuations render normalizing influence both on striped-muscle, and smooth muscle tonus, as well as promote circulatory improvement in pelvic organs due to the influnce on local, segmntary and suprasegmentary regulation gears. Ther is also revealed, that the action of mechanical fluctuations of variable frequency - variable frequent modulations (VFM) on pelvic organs and lumbosacral vertebral part leads to an increase of estrogen quantity in blood. Taking into account a positive VFM action on main pathogenic mechanisms of urogenital disturbances occurrence in women - atrophic changes in pelvic urogenital organs, caused by decrease in estrogens, we have applied the given effect for correction of specified disturbances.

We applied a complex VFM effect on local (transvaginal) and segmentar (lumbosacral vertebral part) levels according the original technique in 7 patients. As a source of VFM we used «A device for massage « (copyright certificate  $N_2$ 3205, 1996) and "Devices for endovaginal massage" (copyright certificate  $N_2$ 9810183 / 1, 1998) on a original technique. A duration of procedure made 7 - 10 minutes during 10-daily sessions. During procedures in 100 % patients we seen essential improvement of a condition in urogenital sphere: disappearance of nicturia, urine stress incontinence and disuric disturbances. It is also revealed, that vaginal pH before the procedure, was found to be within the limits of 6,5 - 7,5, and to the end of treatment was reduced on 1-2 units, that displayed by reduction in dryness, itching and dispareunia. It is necessary to note, that in women with intact reproductive organs the recourse of urogenital dusturbances was more fast, than in patients with removed ovaries and uterus.

Thus, despite a preliminary character of results received by us on urogenital disturbances correction in women, of perimenopausal age by action of variable frequent modulations, it is possible to generalize about prspective in use of a given method in practice.