

THE ROLE OF BREACH OF REGENERATION AMONG MEN OF OLDER AGE GROUPS IN DEVELOPMENT OF ANDROGEN DEFICIENCY AND CARCINOGENESIS

A. Pechersky, V. Pechersky, M. Aseev, A. Droblenkov,
V. Semiglazov

St. Petersburg Medical Academy of Postgraduate Studies, St. Petersburg, Russia; State Academy of Physical Education in the name of P.F. Lestgaft, St. Petersburg, Russia; Ott's Institute of Obstetric and Gynecology, St. Petersburg, Russia; Judicial-Histologic Department, Central Administrative Board of Public Health Services "Bureau of Judicial-Medical Examination of St. Petersburg, St. Petersburg, Russia; N.N. Petrov Scientific-Research Institute of Oncology, St. Petersburg, Russia

Objectives: The likelihood of the development of oncological pathology increases significantly after 40 years of age (Napalkov, 1989). From this time one can see a reduction in the number of pluripotent stem cells as well as in the amount (in men) of testosterone circulating in the blood. This phenomenon has been named partial androgen deficiency of aging men (PADAM) (Bremner et al., 1983; Gray et al., 1991). The cause-and-effect relations of these phenomena are an interesting subject of study. **Material and methods:** The first study group had 7 patients who were given a transplantation of donor stem hemopoietic cells in connection with chronic myeloleukemia. **Results:** In the first study group a comparison of blood samples from the patient and his close relative (mother or father) revealed the materials to be unrelated one year (or more) after transplantation, while the recipients had the same blood group as the donor. In 6 cases two types of cells were found in the recipients' cheek cells of the epithelium with a genotype of two various individuals, while in one case related cells were found which had the genotype of an individual who wasn't a relative of the mother of the recipient. Androgen receptors were found in the stem cells of 5 male donors. **Discussion:** The pluripotent stem cells make up a universal regeneration mechanism. An age-related reduction in the number of stem cells breaks down the processes of regeneration of tissues, including endocrine organs. The partial androgen deficiency which develops among men of older age groups intensifies these changes. The risk of development of oncological diseases increases, while destructive changes take place in connective tissue (with a reduction in solidity characteristics), as well as in the skin and other tissues and organs among people of older age groups.