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## THE EFFECT OF COMBINED ACTION RADIATION AND HIGH PRESSURE OF OXYGEN ON TESTIS OF MICE

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In recent years a method of high oxygen pressure (HBO)-therapy has been widely used in medical practice in treating oncologic diseases. For this reason irradiation is used together with the method of HBO therapy. In earlier work (Tchebotarev, e.a. 1991) it is shown that the modifying effect of oxygen lowers the cytogenic effect of radiation in somatic tissues.

Mice of the CBA line were exposed to radiation Co 60~ 500 rad, then to five days of exposure to HBO-therapy (0.3 MPA/per hour). Cytogenetic analysis showed that the HBO-therapy did not induce increased chromosome aberration (ChA) in spermatocytes of the I and II order in mice. Treatment by ionized radiation did not provoke an authentic increase of chromosome aberration quantities in spermatocytes of Order I, neither alone nor by the combined effect with HBO-therapy. However, a considerable increase of ChA was registered in spermatocytes of Order II: 13.6% after irradiation and 14.4% after a combined method of irradiation and HBO (the control level - 0.6%). Moreover, the chromosome aberration spectrum was mostly represented by chromatid bridges. Such an increase of chromosome aberration in Order II meiotic divisions can be connected with the increase of chromatid exchanges in the state of late prophase of the meiosis. The results give evidence of the absence of a modifying effect of HBO-therapy on testicular tissues.