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PAPER TITLE THE METABOLIC EFFECTS OF INFLUENCE OF IONIZATING RADIATION AT PATIENTS WITH
POSTRADIATION ENCEPHALOPATHY

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ABSTRACT (See instructions overleaf)

The revealing of clinico-biochemical and haematological infringements at patients as a result of effect of small doses ionizing radiation can promote to understanding the gears of formation the post-radiation encephalopathy. Was investigated the 300 patients, damaged at liquidation of Chernobyl accident. Were studied the parameters of protein metabolism, acid- main condition, waterionic exchange, mediomolecular peptides, adaptation parameters (index Garkavi). The clinical and laboratory parameters are processed mathematically, on basis that the mathematical models of gravity condition of patients and gravity of metabolic infringements are created. The models were compared among themselves. The significant infringements of metabolic homeostasis in form the change of parity of protein fractions, activity of sulphhydryl groups, free and connected water, increase of hamatocrit, medium molecules, activity of transaminases, hypoosmolarity are found out. Was detected the heterogenesis and undulation of biochemical deviations in dynamics of disease and intensification in time (in researches 1991 - 1994 years), with drawing into the increasing number of vital significant metabolic links, that is connected with various degree of exertion of adaptation and compensational reactions. Was established the correlation between the level of erythrocytes and haemoglobin, reduction pO2 and increasing pCO2. That all correlated with level of reduction of active blood reaction, changing of unprotein sulphhydryl groups and transaminases and testified about availability in patients the phenomena of endogenous intoxication and about stress of compensational organism reactions. Was established statistically authentic correlation of clinical and biochemical parameters at majorities of patients.

Thus, revealed infringements on party of metabolitical homeostatis testified about formation at damaged steady pathological conftion and can promote to development the postradiation encephalopathy.