

SUBMITTING AUTHOR

LAST NAME *Vladimir* FIRST NAME *Bebeshko* TITLE *Professor, d.m.*

AFFILIATION

TEL. (044) 430-06-53

STREET *Melnikova 53*

FAX (044) 431-98-30

CODE *254050*

CITY *Kiev*

COUNTRY *Ukraine*

PRESENTING AUTHOR (IF DIFFERENT)

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ABSTRACT (See instructions overleaf)

SUM OF 10-YEARS MONITORING OF HEALTH STATE IN PATIENTS WHO SUFFERED FROM ACUTE RADIATION SYNDROME AS THE RESULT OF CHERNOBYL ACCIDENT.

Bebeshko V.G., Kovalenko A.N., Belyi D.A.

Scientific Center of Radiation Medicine, Kiev, Ukraine

At present time 180 patients, to whom the diagnosis of acute radiation syndrome (ARS) as the result of Chernobyl accident was established in 1986, are living in Ukraine. 13 patients died in postaccidental period from different diseases.

In 40 % of patients there were determined pathological changes in haematopoiesis. It consists of transitory or steady leukopenia and leukocytosis. One patient after ARS III died from erythromyelodysplastic syndrome.

In erythrocytes were revealed changes of enzyme activity of antioxidant defence system, an activation of processes of lipid perosyde oxidation, weakening of mechanism of antiradical defence, increase of membranes destruction and activity of lizosomal enzymes (hydrolysis).

In 1/3 of patients the qualitative and quantitative changes of immunity were revealed.

In hormonal sphere there were observed an increase of basal plasma cortisol level and essential decrease of corticotropin concentration. Long hypotestosteronemia was accompanied by low hypophysis honadotropic activity and hyperprolactinemia. 5-6 years after radiation trauma tendency to increase of basal testosterone secretion was appeared. It was less in patients after ARS II and III degree of severity.

Chronic diseases of visceral organs characterise the somatic status of organism. The tendency to increase the digestive tract diseases, cardiovascular pathology, steady psychoneurological disorders, decrease mental and physical working capacity were revealed. The lost of ability to do their professional work was in 90% of patients.

The six cases of thyroid gland hypofunction were found. In others the deviation in hormones that determined thyroid gland function was not statistically reliable.

In half number of patients atherogenic changes in lipid metabolism were revealed. Their frequency and severity didn't depend from severity of irradiation.