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S&T ALERT ITEM NO. 1830
NISC WA: Underwater and Stress Physiology

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TITLE: CHANGE IN THE AMOUNT OF GENERAL SULFHYDRILE GROUPS IN THE BLOOD OF PEOPLE WHO CONTACT RADIATION FROM SHF GENERATORS

SOURCE: Voyenno-meditsinskiy zhurnal, No. 3, March 1973, pp. 63-64.

ABSTRACT: A study was conducted to generate data relative to the changes in the amount of sulfhydrile (SH)-groups which occur in people who come in contact with radiations from SHF generators. Two groups were studied, control and experimental. The examination of the experimental group showed an asthenic condition with neurocirculatory dystonia of the hypotonic type, hypertonic disease of the first stage and other somatic diseases (gastritis, cholecystitis, polyarthritis). A general reduction of the SH-groups was found in the experimental group who had been exposed to SHF radiation. A test which determines the level of the general level of SH-groups is recommended for the diagnosis of intial indications of SHF lesions. The protective action of cystamine was also tested in relation to the level of SH-groups. The general SH-groups were determined before administration of cystamine, and then after 24-, 48-, and 72-hour intervals. The study showed that a clear increase in the amount of SH-groups occurred in the control group. In those who regularly worked with SHF generators the same regularity of increase was noted. In another group of subjects the action of ascorbic acid (which was given instead of cystamine) was checked. It was found that 24 hours after taking the vitamin, the number of SH-groups in the blood did not change. It is concluded that in those people who come into contact with radiations from SHF generators there is a significant suppression of the general SH-groups in the blood. The determination of these groups is recommended as a test for diagnosing the initial indications of lesions caused by a SHF-field. The use of cystamine is recommended for protective purposes.

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