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USE OF NEW IODINE-CONTAINING ORGANIC COMPOUND FOR PREVENTION OF EUTHYROID GOITER

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First in goitre endemic territories three groups of patients with euthyroid goitre were selected. They were invited to take part in the study, informed consent was signed by all subjects (parents of children enrolled for the study signed the consent).

Three controlled groups were formed: Group I - in the Oriol oblast (42 children and adolescents); Group II - 80 adults and 40 children of the Bryansk oblast, Group III – 32 children of the Tver oblast. Two tablets of "Iod-activ" (equivalent to 100mcg of Iodine) were given to each subject daily.

The following results were obtained:

Group I: initial median of urinary iodine concentration was 54 mcg/l, it was 122, 137 and 129 mcg/l in subjects taken Iod-activ for 3, 6 and 9 months respectively. Initial thyroid volume was 23.6±3.1 ml, within the period of the study it was 21.4±2.4 ml, 17.8±2.4 ml, 14.4±2.1 ml in 3, 6, 9 months since the start of the study.

In the Group II initial median of urinary iodine concentration was 73 mcg/l in adolescents and 68 mcg/l in adults, during the investigation it was 162, 134, 142 mcg/l in children and 174, 126, and 132 mcg/l in adults in 3,6,9 months. Initial thyroid volume was 23.3±1.4 ml in boys-adolescents and 21.4±1.0 ml in girls-adolescents respectively; in 3, 6 months of the study the thyroid volume was 20.4±1.7ml; 19.1±0.7 ml in boys; 18.3±1.5 ml and 17.5±0/9 ml in girls. In male adults thyroid volume was 29.6±1.4ml initially and 24.8±1.2 ml in 9 months, in female adults initial thyroid volume was 22.6±1.5, in 9 months it was 18.5±0.7ml.

In the Group III initial median of urinary iodine concentration was 86 mcg/l, when Iod-activ was taken the level was more than 100 mcg/l, to the end of the study it was 129 mcg/l. Initial thyroid volume was 13.25 ±1.8 ml, in 9 months it was 8.25±0.8 ml.

In all groups level of TSH and FT4 did not change considerably in time of investigation, there was positive reduction of ABTG and ABTPO in blood.