

According to our **aim** there have been conducted a research of clinical relationships between diabetes mellitus and hyperplastic processes thyroid gland in type 2 diabetic patients suffers after disaster on Chernobyl accident.

Materials and Methods. 125 males aged 61.95 ± 0.66 years and 24 females aged 62.13 ± 1.34 years (group I), evacuees 6 males aged 56.00 ± 6.45 years and 18 females aged 58.56 ± 2.07 years (group II), dwellers of radiation-contaminated territories 32 males aged 59.69 ± 2.13 years and 67 females aged 58.39 ± 1.23 years (group III), dwellers of Kyiv 18 males aged 59.00 ± 2.45 years and 34 females aged 57.88 ± 2.61 years (group IV) with type 2 diabetes mellitus and pathology thyroid gland were under observation.

Results. The frequency of hyperplastic processes thyroid gland in type 2 diabetic patients suffers after Chernobyl accident higher in females 79.2 % than in males 45.6% ($\chi^2=9.078$; $p=0.003$), as well in control group 55.9% and 16.7% ($\chi^2=7.415$; $p=0.007$), but statistically for sure higher in males suffers after Chernobyl accident than in control group ($\chi^2=5.41$; $p=0.02$). We determined strong direct correlation between thyrotropin and body mass index ($r=0.799$; $p=0.031$), glycated hemoglobin ($r=0.999$; $p=0.027$) in males control group. We provided multivariate analysis for hyperplastic processes thyroid gland and duration of type 2 diabetes mellitus ($F=6.6947$; $p=0.00022$), body mass index ($F=1.7351$; $p=0.15969$), thyrotropin ($F=0.29968$; $p=0.82559$), C-peptide ($F=0.09665$; $p=0.96160$) glycated hemoglobin ($F=0.17955$; $p=0.90996$).

Conclusions. The frequency of hyperplastic processes thyroid gland in type 2 diabetic patients suffers after Chernobyl accident statistically for sure higher in control group not exposed to ionizing radiation and depending on sex, length and decompensation of basic diagnosis.