

## P01-211 - THE INTELLECTUAL DEVELOPMENT OF THE PERSONS EXPOSED IN UTERO: 10-YEARS FOLLOW-UP INVESTIGATION

**S. Igumnov**

*Department of Mental and Behavioral Disorders, Republican Research and Practical Centre of Mental Health, Minsk, Belarus*

**Purpose:** Prospective investigation of the intellectual development at the age of 6-7 years till age 15-16 years among persons exposed in utero following the Chernobyl accident.

**Material and methods:** 250 persons from Belarus exposed in utero following the Chernobyl accident and a control group of 250 persons from non- and slightly contaminated regions. Psychological examinations were performed among persons of both groups at the age 6-7 years, 11-12 years, and 16 years as well as dosimetrical analysis.

**Results:** Mean antenatal internal dose to thyroid gland arising from the intake of  $^{131}\text{I}$  among persons of exposed group is  $390\pm 550$  mGy (maximal dose - 4100 mGy), in control group -  $35\pm 65$  mGy. Mean antenatal external dose among persons of exposed group is  $10\pm 13$  mGy. At the age of 6-7 years the persons in the exposed group had a mean Full Scale IQ lower than the control group ( $89.6\pm 10.2$  vs  $92.1\pm 10.5$ ,  $P=0.007$ ). At the age of 11-12 years there was no statistically significant difference between the two groups ( $94.3\pm 10.4$  vs  $95.8\pm 10.9$ ,  $P=0.117$ ). Positive dynamics of intellectual development in persons of both groups has been observed up to age of 16 years ( $98.7\pm 10.2$  и  $99.5\pm 10.5$ ,  $P=0.171$ ).

**Conclusions:** No statistically significant correlation was found in exposed group between individual thyroid dose as well as individual antenatal external dose and IQ at the different ages.