

The method for assessing irradiation in utero consists in multichannel recording of electric activity of the brain taking into account also such parameters as calendar age in years (X_1) and spectral output of δ -range. The electric activity of the brain is assessed in the left frontal (X_2) and central frontal (X_3) areas. Furthermore, the spectral output of θ -range is assessed in the left frontal (X_4) and left temporal (X_5) areas. The spectral output of α -range is assessed in the left temporal (X_6) and left frontal (X_7) areas. The spectral output of β -range is assessed in the left frontal (X_8) and right frontal (X_9) areas. The spectral output of each range being assessed is calculated as the percentage of the overall spectral output throughout all the ranges. Then the integral coefficient (IC) of psychophysiological alterations is calculated according to the formula:

$$IC = 443.8 - 0.15 \cdot X_1 + 1.32 \cdot X_2 + 1.27 \cdot X_3 - 3.36 \cdot X_4 - 3.59 \cdot X_5 - 1.28 \cdot X_6 - 1.54 \cdot X_7 + 0.32 \cdot X_8 + 0.61 \cdot X_9,$$

where 443.8 – the absolute term of the discriminant function; -0.15, 1.32, 1.27, -3.36, -3.59, -1.28, -1.54, 0.32, 0.61 – the weight coefficients for the parameters of the discriminant function. $IC > 375$ points to the irradiation in utero.