



### **Fund “Nauka” Project № 20026 Resume – Competition-Based Session 2020:**

“Cardiometabolic changes and assessment of some psychological aspects in girls and young women with non-classical form of congenital adrenal hyperplasia”

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Non-classical congenital adrenal hyperplasia (NCCAH) is a common autosomal recessive disease caused by partial or complete 21-hydroxylase deficiency, causing increased production of adrenal androgens and steroid precursors. As a hyperandrogenic condition, it negatively affects psychological health and quality of life.

**Aim:** To evaluate the clinical-laboratory profile, psychological health, and quality of life in patients with NCCAH compared to healthy controls.

**Materials and methods:** A cross-sectional study was conducted. It included 34 patients with NCCAH (mean age  $16.2 \pm 3.4$  years) and 34 healthy controls (mean age  $15.0 \pm 3.1$  years). Data on anthropometry, clinical and laboratory features of hyperandrogenism, and menstrual irregularities were collected. A validated World Health Organization (WHO) Quality of Life Questionnaire-26 was used to assess physical (D1) and psychological (D2) health, social relationships (D3), and environment (D4). Psychological assessment was evaluated using the EDI-3 standardized questionnaire.

**Results:** Hirsutism and acne were more common in girls with NCCAH, also showing a higher Ferriman-Gallwey score ( $18.7 \pm 5.3$  vs  $7.7 \pm 8.3$ ,  $p < 0.001$ ) correlating with Androstendione and 17OHPregesterone levels ( $r = 0.519$ ,  $p < 0.001$ ,  $r = 0.424$ ,  $p < 0.001$ ). The presence of overweight or obesity was found in 17.7% of all participants, with no significant difference between groups. Analyzing the WHO Brief QoL questionnaire, the NCCAH girls showed significantly lower physical and psychological health scores as well as worse EDI-3 scores on 8 of all the psychological scales used.

**Conclusion:** Girls with NCCAH commonly demonstrate both clinical and biochemical hyperandrogenism, which is closely associated with impaired QoL and psychological health.