

## **THYROID AUTOIMMUNITY IN GIRLS WITH TURNER SYNDROME**

Ewelina Witkowska-Sędek, Ada Borowiec, Anna Kucharska, Karolina Chacewicz, Małgorzata Rumińska, Beata Pyrzak

Department of Pediatrics and Endocrinology, Medical University of Warsaw, Warsaw, Poland

**Introduction:** Turner syndrome (TS) is associated with increased incidence of autoimmune diseases, especially of the thyroid gland.

**Aim of the study:** Assessment of prevalence of autoimmune thyroid disorders among pediatric TS patients.

**Material and methods:** The study group consisted of 40 girls with TS, aged 5.8 – 18 yrs. The study was retrospective. Free thyroxine (FT4), thyroid stimulating hormone (TSH), anti-thyroid peroxidase (TPO-Ab) antibodies, anti-thyroglobulin (TG-Ab) antibodies and karyotype were analysed. Correlation between karyotype and incidence of thyroid autoimmunity was also examined.

**Results:** In 10 (25%) out of the 40 girls thyroid autoimmunity was detected. 3 girls from that group were euthyroid, 4 had subclinical hypothyroidism and 3 were diagnosed with overt hypothyroidism. In the group affected by thyroid disease, 6 patients had mosaic karyotype with X isochromosome (n=4) or with deletions (n=2) and 4 had the 45,X0 karyotype. Considering the small number of patients in the study group, our results have no statistical significance.

**Conclusions:** According to our study, 25% girls with Turner syndrome have autoimmune thyroid disorders occurring in childhood. It is indicated to monitor thyroid function in these patients because they are prone to develop hypothyroidism.