

Mother's History Of Thyroid Disease As A Risk Factor For The Occurrence Of T1DM In Children

Ntikoudi Anastasia¹, Kandiltsiou Maria², Avrampou Vasiliki³, Boulazeri Smaragdi⁴, Vlachou Eugénias

1. RN, MSc Diabetes Mellitus & Obesity, PhD (C), Academic Fellow, Nursing Department, University of West Attica, Athens, Greece
2. RN, MSc, Children's Hospital "Aglaia Kyriakou", Athens, Greece
3. RN, Children's Hospital "Aglaia Kyriakou", Athens, Greece
4. RN, MSc©, Nursing Department, University of West Attica, Athens, Greece
5. Professor of Nursing, University of West Attica, Athens, Greece

Background: Type 1 diabetes (T1DM) is the most common chronic childhood disease and if left untreated leads to fatal coma. Both genetic and environmental factors appear to play a role in the onset of the disease.

Aim: The aim of the study was to investigate the maternal history of children regarding the occurrence of T1DM in childhood.

Method: The population of the present retrospective study (examination of medical records) consisted of children aged 6 months to 12 years who were monitored at the Diabetes Center of the Children's Hospital "Aglaia Kyriakou". The sample of the research study consisted of 150 children with T1DM (diagnosed in the last five years) and 100 children without T1DM with similar demographic characteristics from other clinics (control group).

Results: An important finding from examining the maternal history was the presence of some form of thyroid disease in mothers of children with T1DM, [$\chi^2 = 8.47$, $p = 0.04$]. Regarding other chronic diseases of the mother, besides thyroid diseases (28.7%), gestational diabetes (8%) was the second endocrinopathy of family history. Another finding which needs consideration was the statistically significant level [$\chi^2 = 9.86$, $p = 0.02$] found in children without T1DM, who had mothers with type 2 diabetes.

Conclusion: The present retrospective research study showed that the presence of thyroid disease marks a possible risk factor for the development of T1DM in children. Type 2 diabetes in mothers is not associated with T1DM in their children. It is considered important that multicenter prospective research studies with a large number of samples to be conducted in order to establish if the thyroid disease could be a risk factor of T1DM in children.