HOW ADIPOnectin CORRELATE WITH DISEASE DURATION AND Atherogenic Indices In Type 1 Diabetes

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**ABSTRACT**

**BACKGROUND:** The most common childhood-onset endocrine metabolic disorder, type 1 diabetes mellitus (T1DM), is usually an autoimmune disease. Adiponectin, an adipocyte-derived hormone, shows beneficial effects in both improving of insulin sensitivity and mitigating vascular damage while enhancing cardioprotection.

**OBJECTIVES:** Our aim was to investigate the relationship between adiponectin and plasma cardiovascular risk assessment ratios as “atherogenic indices” and diabetes duration in children and adolescents with Type1 diabetes mellitus "T1DM" in Egypt.

**SUBJECTS AND METHODS:** Sixty clinically diagnosed T1DM patients - subdivided according to diabetes duration - were enrolled into the study. In addition, twenty healthy controls with comparable socioeconomic, age, body mass index, Tanner stage and sex distribution were selected for the study. Glycemic control indices, lipid profile, total adiponectin, microalbumin and urinary creatinine were measured and albumin to creatinine ratio was estimated. Results were subjected to statistical Analysis.

**RESULTS:** Total Adiponectin was significantly elevated in serum of children and adolescents with T1DM irrespective to duration of disease. Adiponectin was inversely correlated with triglyceride level.

**CONCLUSION:** Total serum adiponectin is elevated in T1DM irrespective to duration of the disease. No correlation was found between adiponectin and atherogenic indices.

**KEYWORDS:** T1DM, adiponectin, atherogenic indices, diabetes duration.
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**Ordered list of degrees:**
- **Secondary Stage:** year 2000
- **BSc.:** Year 2005. Bachelor of Pharmaceutical Sciences; Cumulative Grade: “Excellent with Honors”, Ranked 3rd among 320 students, (Faculty of Pharmacy, Helwan University), May 2005.
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**Academic experience:**
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**RESEARCH INTERESTS:**
- Clinical biochemistry
- Tumor markers applications
- Molecular biology
- Stem cell clinical applications

**AWARDS & HONORS:**
- **Helwan University award** as a Privileged student of the college in 2005.
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