

## Evaluation of some autoimmune diseases frequency in a sample of Iraqi patients with type 1 DM

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**Background:** The association of type 1 diabetes mellitus with coeliac disease and thyroid dysfunction is known worldwide due to shared auto immunological and genetic background.

An immune system malady is a condition emerging from an unusual safe reaction to a typical body part. There are at any rate 80 kinds of immune system ailments. Almost anyone part can be included. Regular manifestations incorporate second rate fever and feeling tired. Regularly side effects go back and forth. The reason is commonly obscure. Some immune system illnesses, for example, lupus run in families, and certain cases might be activated by contaminations or other natural factors. Some normal sicknesses that are commonly viewed as immune system incorporate celiac ailment, diabetes mellitus type 1, Graves' ailment, incendiary inside ailment, numerous sclerosis, psoriasis, rheumatoid joint pain, and foundational lupus erythematosus. The determination can be hard to decide.

Treatment relies upon the sort and seriousness of the condition. Nonsteroidal mitigating drugs (NSAIDs) and immunosuppressant are regularly utilized. Intravenous immunoglobulin may likewise incidentally be utilized. While treatment normally improves indications, they don't regularly fix the ailment.

Around 24 million (7%) individuals in the United States are influenced by an immune system ailment. Ladies are more normally influenced than men. Regularly they begin during adulthood. The main immune system maladies were portrayed in the mid-1900s.

Type 1 diabetes (T1D), recently known as adolescent diabetes is a type of diabetes wherein next to no or no insulin is delivered by the pancreas. Insulin is a hormone required for the body to utilize glucose. Before the treatment an outcomes will have high glucose levels in the body. The exemplary manifestations are visit pee, expanded thirst, expanded appetite, and weight reduction. Extra manifestations may incorporate foggy vision, sleepiness, and poor injury mending. Indications commonly create over a brief timeframe.

The reason for type 1 diabetes is obscure, yet it is accepted to include a mix of hereditary and natural

variables. Hazard factors incorporate having a relative with the condition. The fundamental instrument includes an immune system demolition of the insulin-delivering beta cells in the pancreas. Diabetes is analyzed by testing the degree of sugar or glycated hemoglobin (HbA1C) in the blood. Type 1 diabetes can be recognized from type 2 by testing for the nearness of autoantibodies.

**Objective:** To estimate the occurrence of Coeliac disease serological markers and thyroid dysfunction in type 1 diabetic Iraqi children and adults.

**Patients and Method:** This was a cross-sectional study in which a total of 32 patient with type 1 diabetes attending Al Imamai Alkadhymian Hospital ,and the specialized center of endocrinology and diabetes/AlRussafa ; 13 Males, 19 Females with mean age of 20 year  $\pm$  9.9 , from November 2013 - April 2014 were screened for celiac disease using Anti tissue transglutaminase Ab (Anti TTG Ab) and for thyroid dysfunction, using thyroid function test.

**Results:** Anti tissue transglutaminase antibody was positive in 5/32 patients , Resulting in a seroprevalence of 15.6 % .Female patients predominated 9.3 % , over male patients 6.25%.The Predominant age groups are the children and adolescents with a most prevalent duration being 2-5 years of having type 1 diabetes. Screening for thyroid function showed 3/32 patients with subclinical hypothyroidism , resulting in seroprevalence of 9.3% and 2/32 patients with hypothyroidism which accounts for 6.25% ,and only 1/32 patients had hyperthyroidism making 3.1% of the population. Female patients were strongly predominant in overall thyroid dysfunction 15.6% over male patients with only 3.1% mainly subclinical hypothyroidism.

**Conclusion:** There is an association between diabetes type 1 and other autoimmune diseases (Coeliac disease and thyroid disease) .The study showed an increased prevalence of coeliac disease 15.6% in patients with

type 1 diabetes mellitus, there is also an increase in the prevalence of thyroid dysfunction 18.7%, mostly

subclinical hypothyroidism , compared with the general population.