

Global Congress on Integrated Healthcare

A joint Conference in Collaboration with United Research Forum, UK and Mutah University, Jordan

Under The Patronage of his Excellency Dr Yousef Goussous

May 15 - 16, 2022 | Hotel Crowne Plaza Dead Sea, Jordan



Serologic Screening of Celiac Disease in Patients With Type1 Diabetes

***Eman M. Albatayneh** *Department of Microbiology and Pathology, Faculty of Medicine, Mutah University, Al-Karak, Jordan*

Nedal A. Alnawaisehb, *Sameeh A. Al-Sarayrehc, Yousef M. Al-sarairhd, Enas M. Al-Zayadnehe, Mohammad A. Abu-lobbada*

Abstract

Background: Type 1 diabetes mellitus (T1DM) is an autoimmune disorder associated with increased risk of additional autoimmune diseases (AD) as celiac disease.

Objective: The aim of this study was to investigate the prevalence of CDs in a population of diabetic children along with the presence of any suggestive clinical signs and symptoms of CD and any effects of CD on the patients' diabetic control and growth.

Methods: Data from diabetic patients in South Jordan attending the diabetic clinic in the military hospital between 2014 and 2015 were collected. The frequency of CD was calculated. A t-test comparison between CD-seropositive and seronegative diabetic patients, the unadjusted and adjusted odds ratios (ORs) for age, gender, baseline glycated hemoglobin (HbA1c), cholesterol and glucose levels, associated diseases, and body mass index with their 95% confidence intervals (CIs) were evaluated.

Results: One hundred thirty-eight patients with T1DM (median age 16.5 years; 74 females) were recruited. The results showed that CD was in (6.5%) of the patients. The body weight, body mass index, baseline HbA1c and cholesterol levels were significantly different between seropositive and seronegative patients ($P < 0.05$). Adjusted ORs for the presence eczema and family history of T1DM in seropositive CD were 32.66 (95% CI: 2.68 - 398.85, $P = 0.0006$), and 5.79 (95% CI: 1.07 - 31.33, $P = 0.041$), respectively. While the adjusted odd ratio of having high HbA1c and high cholesterol levels in seropositive were 1.76 (95% CI: 1.13 - 2.74, $P = 0.01$) and 1.02 (95% CI: 1.006 - 1.031, $P < 0.001$) respectively.

Conclusions: These findings suggest a need for a careful surveillance of CD in patients with T1DM. This may help in improving the diabetic control and growth control, and avoidance of complications.

Keywords: Type 1 diabetes mellitus; Celiac disease; Autoimmune disease; Diabetic control.

Biography

I have over 11 years' experience as a faculty member at Mutah University, teaching medical students and working on research specific to Immunology and immunologic diseases in south of Jordan. I have many years' performing research on different allergies epidemiology, working with Celiac disease and T1DM community to study the diseases from different aspects.