

Examination of oral and dental clinical symptoms in celiac patients

Abstract

Introduction: Celiac disease is a systemic immune disorder. It occurs in people who are genetically susceptible to gluten in their diet. The clinical characteristics of celiac disease are different and reflect its systemic nature. Most of the symptoms and manifestations of this disease can be controlled with a gluten-free diet (GFD). However, some manifestations will still be present in treated patients. The oral and dental manifestations of celiac disease include: enamel defects, delayed growth, and aphthous like ulcers. This study was conducted in order to investigate clinical symptoms related to mouth and teeth in the celiac patients.

Materials and methods: Out of 323 celiac patients based on the formula for determining the sample size in case-control studies and with a 30% chance of dropping out, 175 people were randomly included in the study. Among them, 173 people were eligible. The control group was also selected in the number of 173 people who did not have celiac disease. The case group and the control group were matched in terms of age and sex. A pre-designed checklist was filled for these patients. The checklist was for evaluating the disease and oral manifestations (plague, enamel defects, oral candidiasis, angular cheilitis, geographic tongue) as well as demographic information (age and sex) and disease history. In the end, the information was analyzed based on statistical analysis methods ($P < 0.05$).

Findings: According to this study, the distribution of dmft and DMFT in patients was normal. According to the T-test, there was no statistically significant difference between the two groups. According to the Chi-square test, no significant relationship was found for the relationship between the frequency of oral lesions and the period of treatment initiation. According to the Chi-square test, the frequency of oral lesions in the patient group in all six age groups and both genders was significantly higher than the control group ($P\text{-value} < 0.001$).

Conclusion: According to the results, oral lesions occur more often in celiac patients regardless of their age range.

Keywords: celiac disease, gluten, tooth enamel, DMFT/dmft and oral and dental manifestations.