

## **Examining the results of paraclinical variables related to the mouth in celiac patients of Ardabil province in 1402**

### **Abstract**

**Introduction:** Celiac disease is an autoimmune disorder of the small intestine with a genetic background. It can cause intermittent abdominal pain, changes in the flow of saliva, changes in the composition and buffering properties of saliva. Some of these symptoms are reduced or eliminated with a gluten-free diet (GFD). Due to the fact that the results of studies related to the relationship between stimulated and non-stimulated salivary flow rate, saliva pH and dry mouth with celiac disease are wide. This study was conducted to investigate the results of paraclinical variables related to the mouth in celiac patients of Ardabil province in 1402.

**Materials and methods:** There are 323 celiac patients. Based on the epidemiology formula, with 80% prevalence of xerostomia in celiac patients and 20% chance of falling, 205 people were randomly included in the study. Among them, 173 people were eligible. All patients filled the questionnaire related to dry mouth. Stimulated and non-stimulated saliva of the patients was collected in a 10 ml plastic container with a graduation of 0.1 ml. Then the pH of saliva was measured by a pH meter. Descriptive statistical methods were used to report the data.

**Findings:** The average amount of unstimulated salivary flow rate and the amount of stimulated salivary flow rate were calculated as 0.24 and 0.78, respectively. The average pH of saliva in this study was 7.05. In addition, the amount of unstimulated salivary flow rate in 49 cases (28.3%) was lower than normal. This number reaches 92 cases (53.2%) in the amount of stimulated salivary flow rate. 52% of patients with celiac disease stated the presence of xerostomia. According to Fishers exact test, no correlation between hyposalivation and xerostomia was seen in patients with celiac disease.

**Conclusion:** The prevalence of low unstimulated saliva in patients was 28.3% (49 people). The prevalence of low stimulated saliva was 53.2% (92 people). 52% (91 people) of patients had xerostomia.

**Keywords:** salivary flow rate, saliva pH, celiac disease, xerostomia