

Abstract:

Evaluation of DMFT / dmft index in children with *Helicobacter pylori* infection: a case-control study

Introduction: *Helicobacter pylori* is one of the human pathogens that has been proven in the oral cavity due to the microaerophilic nature of dental biofilm. It seems that the presence of *Helicobacter pylori* can play a role in the pathogenesis of halitosis, glossitis, recurrent aphthous stomatitis and tooth decay. However, studies in this field are contradictory, so the present study aimed to evaluate the DMFT / dmft index in children with *Helicobacter pylori* infection compared to healthy children.

Materials & Methods: In this case-control study, the samples included children with *Helicobacter pylori* infection and healthy children in Ardabil who referred to the Ardabil Gastroenterology Research Center; A total of 58 children with a age ranging 5-20 years were randomly selected They were examined in two groups of *Helicobacter pylori* negative (n = 39) and *Helicobacter pylori* positive (n = 19). Data collection tools included observation, examination with a mirror and dental explorer probe to detect caries and missing teeth and filled teeth to obtain the DMFT / dmft index. To control the influential variables, a questionnaire was provided to parents, which included demographic variables, tooth brushing, using floss and using toothpaste. Data were analyzed using Human Whitney and Chi-square tests using SPSS software version 21. Significance level was considered less than 0.05 (P <0.05).

Results: The results of the study showed that the participants were not statistically significantly different in terms of sex, age, frequency of brushing per day, use of fluoride toothpaste, flossing in two groups of *Helicobacter pylori* positive and negative (P <0.05), but The duration of brushing around the clock was different in the two groups of *Helicobacter pylori* positive and negative (P = 0.037). Also, the results of the present study showed that there was no significant difference between the two groups in terms of dmft and DMFT (P <0.05).

Conclusion: There is no significant difference in oral hygiene and DMFT / dmft indices between the two groups with positive and negative results from *Helicobacter pylori* test results.

Keywords: *Helicobacter pylori*, DMFT index, dmft index, caries.