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EVALUATING THE EFFECTS OF CIGARETTE SMOKING AND HEATED TOBACCO PRODUCTS ON THE ORAL MUCOSA AND PERIODONTIUM IN PATIENTS WITH HEPATITIS C VIRUS IN ARMENIA: A PILOT STUDY

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ABSTRACT

Since the last decades of the twentieth century, there has been an increase in the incidence of hepatitis C virus. Currently, diseases of the oral mucosa and periodontium are an important problem in dentistry. Interest in the study of combined pathology in recent years is explained by the accumulation of new facts, such as cigarette smoking and harmful chemicals released during smoking, which have a negative impact on the health of the oral cavity. Tobacco consumption is a global public health problem. In addition, in recent years, new types of products such as heated tobacco products have emerged that are marketed as a means of harm reduction, it is important to note that in Heated Tobacco Products products, the tobacco is not directly burned. The aim of this study is to evaluate the impact of cigarette smoking and heated tobacco products on the oral mucosa and periodontium in patients with hepatitis C virus. The study included 192 patients with hepatitis C virus, who were divided into groups: Cigarette smoking with Hepatitis C virus infection (main group, n= 96) and control group Hepatitis C virus infection using heated tobacco products n=96. The average age of patients was 52.05 ± 12.25. A clinical examination of the oral cavity, including the status of the oral mucosa and periodontium, was conducted. Hemorrhages on the buccal mucosa and hard palate were detected in 92.7% of the examined Cigarette smoking with Hepatitis C virus infection patients ($p < 0.001$). Hyperemia and edema of the gums were observed with a high degree of reliability ($p < 0.001$) in the group of patients with Cigarette smoking with Hepatitis C virus infection. Abundant growth of microorganisms was observed in almost all patients in the Smokers with Hepatitis C virus infection group. *P. gingivalis* was cultured 89.1%, *T. forsythia* 93.5%; *E. corrodens* 87% and *A. actinomycetemcomitans* 95.7% cases which had a statistically significant difference ($p < 0.001$) in data compared to the heated tobacco users with Hepatitis C virus infection group. Thus, the oral mucosa and periodontium status of Hepatitis C virus infection patients using the Heated Tobacco Products system were significantly better than that of the patients Hepatitis C virus infection smoking cigarettes. In the Cigarette smoking with Hepatitis C virus infection group, periodontopathogenic microorganisms were observed in 100% of pathological gingival pockets cases. Further studies with larger sample sizes are needed to better understand the oral health of hepatitis C virus patients.

KEYWORDS: Oral mucosa, periodontium, Hepatitis C virus infection (HCVI), cigarette smoking, heated tobacco products (HTPs), heated tobacco users with Hepatitis C virus infection (HHCV).

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