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Oral Conditions Might Cause Severe Outcomes in Patients With Viral Hepatitis Infection

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The world health organization (WHO) has defined "health" as a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity. It is easy to express that complete health and wellness is merely impossible without oral health (1). After tooth decay in humans known as the most common infectious disease in the globe, periodontal diseases including gingivitis and periodontitis are among the most common oral diseases. The periodontal diseases are a group of chronic inflammatory diseases, involving the soft tissue and bone surrounding the teeth in the jaws, known as periodontium. Periodontal diseases are mainly caused by bacterial infection (2, 3). Although a review article published in 2008 showed a possible trend of a lower prevalence of periodontitis in the last 30 years, the authors of the paper recommended more research in the area to approve the evidence (4). To date, the association of various conditions and periodontal diseases has been acknowledged. A long list including overweight/obesity, hypertension, metabolic syndrome, diabetes mellitus, child preterm birth and low birth weight, rheumatoid arthritis and chronic obstructive pulmonary disease can be mentioned (5-7). Therefore, a hypothesis of association between either viral hepatitis infection or its progression and periodontal diseases seems quite close to mind. Previously, the association of several oral diseases including oral lichen planus, Sjogren's syndrome and pemphigus vulgaris with viral hepatitis infection was documented (8, 9).

A study performed by Nagao et al. (10) and published in the current issue is noteworthy from different aspects. Little has been dedicated to reveal the association between periodontal diseases and outcomes of viral hepatitis infection. According to their self-claimed statement of being the first study evaluating periodontal disease and patients with liver diseases resulting from viral hepatitis infection, the results were shocking. The conclusion states that periodontitis might be associated with progression of liver disease in patients with viral hepatitis, hence, control of oral diseases is essential for the prevention and management of liver fibrosis. This conclusion draws the attention of researchers to possible confounding factors never focused before. While performing different research projects on various links between hepatitis and dental setting in the past years, we reflected lack of data experience repeatedly. The conditions that made us urge researchers to develop research on oral fluid and viral hepatitis, viral hepatitis transmission risk during dental treatments and now the role of oral diseases on viral hepatitis have never been acknowledged. However, there are inconsistencies that must be noted before establishing new research. The methodology for studies on periodontal diseases remains elusive. A fundamental prerequisite for any epidemiological study is an accurate definition of the disease under investigation. Unfortunately in periodontal research, uniform criteria have not been established so far. Because of methodological problems the data used to assess treatment needs for periodontal diseases have been of questionable value and are not comparable (11).

Authors' Contributions

Study concept and design: Nima Mahboobi; Drafting of the manuscript: Nima Mahboobi; Critical revision of the manuscript for important intellectual content: Seyed Moayed Alavian; Study supervision: Seyed Moayed Alavian.

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