

Editorial



Exploration of the relationship between periodontal disease and skin disease in honor of Gum Day

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Conflict of Interest

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Since 2009's Gum Day, the Korean Academy of Periodontology has promoted oral health by working with regional public health departments to carry out prevention-focused initiatives as part of a goal to raise public awareness of periodontal disease [1]. The link between systemic disease and periodontitis has been explored in previous studies [2,3]. Moreover, national health management programs relating to noncommunicable and periodontal diseases have established a new model of a disease management system [4]. In honor of the 15th annual Gum Day, we would like to report that the presence of periodontal disease increases the incidence of psoriasis, and furthermore, smoking increases the incidence rate of psoriasis by 27% [5]. As a relatively early example of research linking oral health to dermatologic conditions, a study published in 2007 reported that gingivitis was found in 30% of patients with resistant atopic dermatitis, which improved after gingivitis treatment [6].

A chronic inflammatory condition known as periodontitis affects the tissues that surround teeth [7]. Meanwhile, psoriasis is a chronic inflammatory skin condition characterized by erythematous, scaly plaques with distinct borders [8]. We believe that the pathogenesis of periodontal and dermatologic diseases shares significant similarities. In particular, the immune responses involved in these 2 diseases have certain commonalities despite the differences between these conditions. Chronic inflammation and the activation of immune cells, including T cells and cytokines, are features of both diseases [9,10]. In psoriasis, the immune reaction is focused against skin cells, but in periodontitis, the immune response is directed against the bacteria in dental plaque [11,12]. Both periodontitis and psoriasis involve the activation of pro-inflammatory cytokines, including tumor necrosis factor- α and interleukin (IL)-1, IL-6, IL-17, and IL-23 [13-16].

It has been suggested that treatment for periodontitis might also alleviate systemic inflammation, potentially providing benefits in the prevention or treatment of comorbidities [17]. Thus, it is important to understand the significance of maintaining good oral hygiene along with taking good care of one's gums [18]. Through Gum Day, we hope to continue to raise awareness about the close connection between gum health and systemic health, and to emphasize the importance of treating and preventing periodontal disease.

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