Abstract

Objective: To determine the presence of high-risk and low-risk human papillomavirus (HPV) and to identify the degree of periodontitis in the oral cavity of patients who have periodontal disease. HPV constitutes a heterogeneous viral group capable of producing squamous and verrucous type hyperplasia in both the skin and mucosa, and in recent years, it has been shown to play an important role in oral carcinogenesis. Methods: A total population of 223 patients took part in the study. A saliva swab was taken and periodontal probing was performed on these patients in order to classify this disease. An end-point PCR (chain reaction polymerase) was carried out on samples to determine the presence of high-risk and low-risk HPV. Results: Of the 223 patients under study, 61 were males and 162 females, with an average age of 37 ± 13.07 years and an average age of sexual initiation of 18 ± 2.97 years. Low-risk HPV was found in 3.70% of patients with gingivitis, 2.70% of patients with mild periodontitis and 4.76% of patients with severe periodontitis, and 0.877% in the control group, which suggests a possible relationship between low-risk HPV presence and periodontal disease in the oral mucosa. The fact that more than 45% of the population requires some form of periodontal intervention, from the simplest to the most complex, is evidence that there is a need to implement specific health promotion and protection measures to ensure that the population that is still healthy remains healthy and that those with the disease recover their healthy condition. Conclusions: Our results demonstrate the importance of determining HPV presence in the oral cavity of patients with periodontal disease, which will allow timely detection of lesions with potential progression from premalignancy to cancer.

Key words: HPV, PCR, oral cancer, periodontitis