CLINICAL REPORT

Do elderly edentulous patients with a history of periodontitis harbor periodontal pathogens?

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Abstract

Objectives: The presence of periodontal pathogens in the oral cavity may impact implant survival. Therefore, this study aimed to determine the prevalence of Campylobacter rectus, Porphyromonas gingivalis, Aggregatibacter actinomycetemcomitans, Prevotella intermedia, Tannerella forsythia, Treponema denticola, Eikenella corrodens, and Parvimonas micra in a specific elderly population with a history of periodontitis who have never worn dentures.

Material and methods: Thirty dentate subjects (mean age 61.7 ± 7.05 years) and 30 edentulous subjects (mean age 65.8 ± 8.05 years) were included in this cross-sectional study. Microbiological samples of cheek mucosa and the dorsum of the tongue were taken from all subjects. In addition, sulcus samples were taken from the dentate group. All samples were analysed using a bacterial DNA-specific polymerase chain reaction.

Results: All the pathogens studied were detected in dentate and edentulous subjects. When cheek and tongue samples were combined, C. rectus, A. actinomycetemcomitans and E. corrodens presented with a similar prevalence in both groups, whereas the other species were more prevalent specifically in the dentate group (P<0.05). In dentate subjects, P. intermedia and T. denticola were present in higher frequencies in the cheek mucosa (26.67% and 66.67%, respectively), whereas P. gingivalis and T. forsythia were more prevalent in the tongue samples (26.67% and 56.67%, respectively).

Conclusions: Periodontal pathogens may persist in the oral cavity of edentulous subjects who have had periodontal disease, even 1 year after the extraction of all teeth and in the absence of other hard surfaces in the mouth.

Key words: bacteria, edentulous, elderly, prevalence

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Are You Ready for the Betel Nut?

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Introduction

As Texas becomes more diverse in its urban populations, dentists need to be knowledgeable of different cultural habits that could affect the oral health of their patients. Asia is full of wonderful customs and rituals. Some of these customs have been handed down through the generations. Teeth have always been important in world cultures, but white teeth are not always the standard. In some cultures, black teeth are beautiful and caries free.

Betel nut chewing is a widespread Asian custom that has been passed on from generation to generation. Betel nut (also known as areca nut) use typically refers to a combination of 3 ingredients: the nut of the betel palm, part of the Piper betel vine, and lime. Chewing the mixture of areca nut and betel leaf, sometimes called a quid, is a tradition which dates back thousands of years from south Asia to the Pacific. In some areas of Asia, the areca nut and the betel leaf are even considered an important symbol of love and marriage. It is misleading to say that betel nut is chewed. Like chewing tobacco, betel is inserted between the cheek and gum and left there to soak, sometimes for hours. What is chewed is primarily areca nut, sometimes wrapped in betel leaf, with mineral lime added as a catalyst. It has been indicated that small doses generally lead to euphoria and increased flow of energy while large doses often result in sedation. Chewers have said they get a feeling of well-being, stimulation, power, and an increased capacity to work. Some patients have said it acts as a pain reliever for tooth aches and, believe it or not, a remedy for bad breath. Whether chewing betel nut is addictive or not is like asking whether coffee is addictive, as the answer varies.

One of the unusual aspects of chewing the betel nut is an outpouring of a red tinted saliva flow. The characteristic spit can be found on the ground in areas where this habit occurs. Chewers of the betel nut receive no benefit from swallowing the spit. It has been estimated that betel nut is chewed by 10-15% of the world’s population. Another interesting aspect of the betel nut is that people who chew this for a long time have fewer decay problems. Studies are

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The author has no declared potential conflicts of financial interest, relationships and/or affiliations relevant to the subject matter or materials discussed in the manuscript.

This manuscript has been peer reviewed.

Key words: betel nut, Burmese, blackened teeth, cultural differences, education