Abstract

Special Article

The Interaction between Diabetes and Periodontal Disease

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Abstract

During the last decades, there has been an increasing interest in the relationship between diabetes mellitus (DM) and periodontal disease (PD), two chronic diseases that affect a quite large proportion of the world's population. Since the mid-1960s, several studies have been published in the world literature to clarify their bidirectional relationship. Epidemiological data verify that diabetes is a major risk factor for periodontal disease; susceptibility to periodontitis is increased almost three times in patients with diabetes. On the other hand, there is emerging evidence to support that periodontal inflammation can lead to poor glycaemic control. The prevalence of diabetes in periodontal patients was reported to be about 4%. The mechanisms that link these two conditions are not completely understood and require further research, but they involve the presence of advanced glycation end - products (AGEs), neutrophil activity, and cytokine biology. Furthermore, several meta-analyses have reported a significant reduction in HbA1c of 0.4%, 3-6 months after conventional periodontal therapy.

Key words: diabetes mellitus, periodontitis, inflammation, oral hygiene.