

Uncontrolled Glycemia in Diabetes Affects Oral Health-Related Quality of Life

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Opinion

Diabetes Mellitus (DM) is considered as one of the main public health problems worldwide and increases the rate of hospitalizations, disabilities, and mortality. The World Health Organization estimates that, in 2014, 422 million adults in the world (8.5% of the population) had diabetes, and since 1980, this number has quadrupled. This increase is related to the risk factors such as being overweight, sedentary lifestyle, and alimentation. DM is characterized by prolonged increased levels of glucose in the blood which leads to the development of microvascular complications (retinopathy, neuropathy, nephropathy, amputation, and periodontitis) and macrovascular complications (cardiovascular and stroke) [1-6]. Glycated hemoglobin (HbA1c) is the gold standard for monitoring glycemic control and higher levels of HbA1c (>6.5%) has been associated to increase the risk to develop diabetes complications. There is strong evidence that periodontitis is associated with DM and both diseases have a bidirectional relationship. Therefore, an uncontrolled glycemia in DM patients triggers immunological repercussion, physiological, psychological, and social problems. Oral Health-Related Quality of Life (OHRQL) can be assessed using the Spanish version of the Oral Health Impact Profile-14 (OHIP-14sp), which is an instrument validated in the Spanish speaking population and measures physical, social, and psychological aspect in individual's life that adversely affects oral health. Some studies have demonstrated that quality of life is affected among patients that present loss of epithelial attachment, loss of teeth, and cavities among others. The subjective evaluation of the impact of periodontitis on an individual's quality of life and the consequences of suffering from this disease have been shown in different studies. Several studies show that uncontrolled glycemia worsens the periodontal clinical characteristics such as gingival redness, clinical attachment loss and pocket probing depth [7-12]. Moreover, Severe damage in tissue in the oral cavity has been reported to be associated with the development of DM. These complications include periodontal diseases, salivary dysfunction, oral fungal and bacterial infections, oral mucosa lesions, stomatitis, geographic tongue, benign migratory glossitis, fissured tongue, traumatic ulcer, lichen planus, lichenoid reaction and angular cheilitis, all the above affect daily life.

Other hand, uncontrolled glycemia in DM patients increases the risk to develop complications, and these affect psychological and social aspects in quality of life in patients who suffer with DM. In this sense, the OHIP-14sp show that DM patients have an impact on psychological discomfort, physical pain, and physical disability [13-20]. Nevertheless, the impact of uncontrolled glycemia in quality of life in DM commonly are influenced by demographic and sociocultural factors, where a few marginalized geographic areas show a decrease of the impact in the quality of life. Moreover, the care of diabetes includes different aspects of day to day from feeding, habits of physical and educational. Several studies have shown a relation between background education and complications in DM. Countries with low development have demonstrated a maximum of 7 years of studies, which could justify the lack of health care, the increase in the incidence and complications of chronic disease such as diabetes [21-23].

Conclusion

The need for treatment for patients with DM should be multidisciplinary between health professionals, general practitioners, specialists, and dental surgeons, who have the responsibility of doing a detailed inspection. This has the goal of channeling the patients to the corresponding areas such as preventive medicine, physical rehabilitation, and psychology. In this way, the correct control of patients with DM will be achieved and to obtain a good quality of life.

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