Letter to the Editor

Should medical clinicians be involved in orodental screening of diabetic patients?

Sir,

The prevalence of diabetes mellitus (DM) is increasing worldwide and is estimated to double by 2025 compared to 2000, with higher rates reported from Asia [1]. A report from in the Islamic Republic of Iran revealed that 7.7% of the population aged 25–65 years were affected by DM [1].

A bidirectional correlation between the presence of periodontitis and systemic diseases, such as cardiovascular diseases associated with atherosclerosis, bacterial endocarditis, diabetes mellitus, respiratory disease, preterm delivery, rheumatoid arthritis, osteoporosis, renal diseases and Alzheimer disease, has been claimed [2]. Periodontitis is classified as the sixth complication of DM [3]. Poor glycaemic control accelerates periodontitis progression and vice versa, higher probing pocket depth (PPD) and clinical attachment loss (CAL) are linearly related to higher impaired fasting glucose (IFG) [2-4]. It is reported that alveolar bone loss is increased 11-fold in DM type 2 [5]. In addition, among children with type 1 DM, altered dental development, increased DMF (D: decayed, M: missing, F: filled teeth) scores and worse periodontal indices are observed [6]: the higher the rate of caries and periodontitis, the higher the chance of missing a tooth.

A clear mechanism for this is not known; however, pro-inflammatory cytokines, increased collagenase activity and advanced glycation end products (AGEs) may be responsible for destructive properties of DM affecting both oral soft and hard tissues [4]. The World Health Organization (WHO) global burden of disease report noted that edentulism constituted a considerable portion of the disability-adjusted life year (DALY) score reported for the Iranian population > 60 years old [7].

Aesthetics, mastication function and speech are impaired in patients with lost teeth. Early detection of dental caries and attention to the primary signs of periodontitis prevent the progression of the disease to more advanced stages. Tooth restorations or teeth substitution with either removable dentures (partial or complete) or fixed partial dentures (e.g. crowns, bridges and implants) are both costly and time-consuming. Moreover, high cost of dental visits should not be forgotten. Hence, immediate referral of patients diagnosed with DM type 2 for dental visits is encouraged. In addition, metabolic and dental screening of first-degree relatives of type 2 diabetes patients may be wise [1]. Active participation of general physicians in early detection/screening/referral and those involved in the care of diabetic patients (paediatricians, internists and family doctors) in educational and preventive approaches would decrease the therapeutic costs and would increase the quality of life. Accordingly, a short teaching course that covers both theoretical and practical aspects is recommended for clinicians who encounter diabetic patients on a frequent basis. Such educational courses would enhance the knowledge of doctors and allow them to perform professional and confidential soft and hard oral tissue examinations.

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