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Review Article:

Protocol of Periodontal Management for Diabetic Patient

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Abstract

Diabetes mellitus is an endocrine-metabolic disease produced by non-well controlled. Blood glucose levels because of deficiencies in insulin production or activity. Clinical and epidemiological studies have shown that patients with a long history of diabetes seem to have more periodontal tissue breakdown than age matched, non-diabetic controls. The influence of diabetes over periodontal disease is well established, but the effect of periodontal disease and its treatment over the diabetes control is not so clear. For Periodontal management to diabetic patients you may face many problems regarding diabetes complications, timing for treatment diet Medication balance, dealing with apprehensive diabetic patient dealing with the most common dental office complication, the need for antibiotics and host modulatory agents, the acceptable laboratory values before performing periodontal surgery, lastly the preventive strategies to minimize the debilitating effects of diabetes on the patients periodontium. The goal of the present study was to formulate a guideline of periodontal management for diabetic patient.

Key Words: Diabetes – Periodontitis – Protocol – Treatment.

Introduction

DIABETES is recognized as an important risk factor for periodontitis. Periodontitis is a common chronic inflammatory disease characterized by destruction of the supporting structures of the teeth and has multiple negative impacts on the quality of life [1]. Epidemiological data confirm that diabetes is a major risk factor for periodontitis; There is a clear relationship between degree of hyperglycemia and severity of periodontitis. Susceptibility to periodontitis is increased by approximately threefold in people with diabetes [2]. Periodontal infection on another hand complicates diabetic conditions through several pathological mechanisms including exaggerated production of stress

hormones than antagonizing insulin action, elevated circulating levels of interleukin (IL)-6, tumour necrosis factor (TNF-a) which can worsen insulin resistance and thereby impair glycaemic control [3].

Treatment of periodontitis is associated with HbA1c reductions and improvement of diabetic status in general, therefore oral and periodontal health should be promoted as integral components of diabetes management [4,5].

Material and Methods

The data collected for the present review were obtained from the pervious studies and investigations performed by the author from 1991-2010 concerning the bi directional relation between diabetes and periodontal diseases and the outcome of different periodontal treatment modalities on both diseases.

Proteolytic activity of Subgingival microflora was estimated in 18 diabetic and 21 nondiabetic [6]. The clinical and microbiological effect of tetracycline (TCN) subgingival irrigation was studied on 13 type II diabetics & 13 non diabetics all suffering from periodontal disease [7]. The relation between diabetic periodontitis and diabetic retinopathy was investigated [8], periodontal conditions of 64 adult diabetic patients with differant grades of diabetic retinopathy were evaluated including bleeding & plaque indices, pocket depth and bone level index. The effect of splinting abutment teeth under overdentures on their supporting structures in diabetics was studied on 24 diabetics with edentulous maxillary arch and standing mandibular canine and second premolars [9]. Regarding the immunological profile of diabetic periodontitis a

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