



‘Sugar’ the ‘Serial Killer’ Diabetes & Oral Health

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Abstract

Diabetes mellitus, is a chronic disease majority affecting the individuals worldwide.

In 2012, 1.5 million individuals died because of high blood glucose level resulting in CVS & other systemic diseases.

Globally cost of diabetes mellitus was Us.31hillium in 2015.

Introduction

- Diabetes mellitus (DM) is a heterogenous group of clinical & genetic metabolic disorders recognized by abnormally high levels of glucose in blood.
- Broadly classified as – Type 1 (DM1) & Type 2 (DM2)
- Diabetes mellitus 1- Absolute reduction of insulin production due to destruction of β - cells in Diabetes mellitus 1.
- Diabetes mellitus 2 – Non – Insulin dependent on resistance of effects of insulin.
- Diabetes patients manifests a high prevalence of oral problems such as dental caries, xerostomia, periodontal disease, sensory disorders, taste problems, salivary gland dysfunction.
- Younger populations are new suffering from Diabetes mellitus due to westernized lifestyles, poor eating habits & increased obesity.

Aim

- This article utilizes the prevalence data of diabetes mellitus from the world health Organization & International Diabetes federation.

Oral Manifestation and Complications

- Oral complications includes periodontal disease oral candidiasis, tooth loss, xerostomia, halitosis, delayed wound healing, burning mouth syndrome salivary and taste dysfunction, tooth decay, lichen planus geographic tongue & complications associated with dental implants.
- Periodontal disease is a highest risk factor of Diabetes mellitus Periodontitis is high in diabetic patients, deep pockets & attachment loss are common in patients with poorly controlled diabetes. Risk of alveolar bone loss is 11 times high. There is bidirectional relationship between periodontal disease & Diabetes mellitus.

- Candida is normal commensal of oral cavity but hyperglycemia, immune
- Dysfunctions & acid production promote candidal infect associated with increases salivary glucose.
- Tooth loss in diabetic patients due to severity of periodontal disease, leads to alveolar bone destruction resulting in tooth removal.
- Xecosytemia, in Diabetes mellitus atients there is decreased production of salvia from salivary gland leading to plague, halitosis prosthesis intolerance, nutritional deficiency, speech problems etc.
- Burning mouth syndrome often linked with dysgeusia and xerostemia. Its symptoms improve in morning my worsen in day diminish at night. Patients with peripheral diabetes neuropathy are susceptible to burning sensation in oral tissues.

Result

- Many diabetic patients are unaware of association between Diabetes mellitus & oral health. Changes in lifestyle (control of blood glucose levels & self care) regularals dental checkups emphasis on periodontal assessment & reinforcement of oral health instruction can prevent oral complications of Diabetes mellitus scalling & root planing are effective.

Conclusion

- Dentists should be part of an interdisciplinary team of health providers.
- Awareness caups & projects should be done which emphasis on good oral hygeiene & maintain high glucose levels.

Reference

1. Loe H. Periodontal disease. The sixth complication of diabetes mellitess.
2. Lakschevitz F, Aboodia G, Tenenbalin H, Glogauer M. Diabetes & periodontal diseases: interplay & links.
3. Hugoson A, Thorstensson H, Falk H, Kuylenstierna J. Peridontal conditions in Insulin-dependent diabetes. Journal of Clinical Periodontology.
4. Williams RC, offen bacher S. Periodontal medicine: the emergence of a new branch of periodontology.