INTERNATIONAL SUMMIT ON DIABETES, ENDOCRINOLOGY, AND METABOLIC DISORDERS

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Diabetes Through the Lens of Oral Health: A Comprehensive Exploration

Abstract:

Introduction

Diabetes, defined as a chronic condition marked by high sugar levels, is increasingly prevalent globally leading to a rise in associated complications. Among these, oral health issues in diabetic patients are particularly significant, highlighting the need to address the often-overlooked aspect of oral care in diabetes management. This study aims to investigate the evidence linking oral diseases with diabetes, emphasizing the need for transdisciplinary collaboration to enhance patient outcomes.

Methodology

The study performed a systematic review of approximately 50 existing literature sources and intraoral examination of diabetic patients to explore the relationship between diabetes and oral health. Utilizing databases such as PubMed, Google Scholar, Scopus, and other relevant academic journals, the research aimed to identify articles discussing the correlations between these domains. The data obtained were subsequently synthesized to offer a thorough insight into the topic.

Results

Data demonstrate that several oral health complications are associated with diabetes. Periodontal changes often serve as the first clinical manifestation of the disease and have a bidirectional relationship with diabetes depicting that each can affect the other. Furthermore, as age and blood sugar levels increase, diabetic patients experience more dental caries. Additionally, burning mouth syndrome in diabetic neuropathy worsens with poor metabolic control, leading to hyposalivation and severe oral health issues. Moreover, long-term poorly controlled diabetes heightens the risk of oral candidiasis.

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Conclusion:

The burden alleviation of diabetes requires collective efforts from all societal sectors. Clinicians must actively participate in screening, early detection, prevention strategies, self-management counseling. Individualized prevention strategies, including regular dental visits, oral education, and dietary assessments, should be designed to maintain oral health and inhibit dental caries and periodontal disease. Increased awareness about the implications of diabetes on oral health is necessary to improve overall quality of life and address untreated morbidity in the community.

Keywords: diabetes, oral complications, early diagnosis

Biography:

Madinabonu is a junior student at the School of Dentistry, Central Asian University in Tashkent, Uzbekistan. Her keen interest in various academic aspects have earned her the prestigious toppers award. In addition, under the guidance of Prof. Riddhi Chawla, she has published an article in a Scopus-Indexed journal. Engaging actively in student council activities, she showcases remarkable leadership skills. Beyond her studies, she passionately volunteers in various events and contributes her time to charitable work needed for hospitals. Fluent in Uzbek, English, Russian, and Hindi Madinabonu's multilingual proficiency reflects her cultural adaptability and facilitates effective communication across diverse communities.

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