TREATMENT OF PERI-IMPLANTITIS – A LITERATURE REVIEW

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INTRODUCTION

Peri-implantitis is a chronic, destructive process that occurs adjacent to implants. This disease is often characterized by inflammation, bone loss, and pocket formation. The prevalence of peri-implantitis is influenced by lifestyle factors including smoking, alcohol consumption, and stress. Although the causative pathogen is not definitively identified, it is believed to be a complex and multifactorial condition. The primary etiologic agents involved in the development of peri-implantitis are bacteria, which contribute to the progressive destruction of the implant-bone interface.

In this review, the focus will be on the pathogenesis of peri-implantitis, the treatment options available, and the outcomes reported in the literature. The primary objective is to identify effective treatment strategies for peri-implantitis.

MATERIALS AND METHODS

A comprehensive search of the literature was conducted using the PubMed database. The keywords used included “peri-implantitis,” “treatment,” and “literature review.” Only English-language articles were included. The search was limited to articles published from 2000 to 2020. The results were screened for relevance, and the relevant articles were included in the review.

RESULTS AND DISCUSSION

The prevalence of peri-implantitis is a growing concern in dental practice. Although the exact prevalence is not known, studies have estimated that up to 50% of dental implants may be affected by peri-implantitis. The disease is more common in the anterior maxilla and mandible, where the esthetic demands are higher.

The causative agents of peri-implantitis are not well-defined, but it is believed to involve a complex interplay between host factors and microbial factors. Host factors include smoking, diabetes, and systemic diseases, while microbial factors include bacteria, such as Porphyromonas gingivalis and Tannerella forsythia.

Treatment options for peri-implantitis include surgical and non-surgical interventions. Surgical interventions include guided tissue regeneration (GTR), guided bone regeneration (GBR), and modified GTR. Non-surgical interventions include mechanical debridement, chlorhexidine rinses, and antibiotics.

Surgical interventions are typically reserved for cases with severe bone loss and inflammation. GTR involves the placement of a membrane over the bone defect to promote new bone formation. GBR involves the placement of a bone graft material to fill the bone defect. Modified GTR involves the combination of GTR and GBR.

Non-surgical interventions are typically used for cases with mild to moderate bone loss and inflammation. Mechanical debridement involves the removal of the bacterial plaque and biofilm from the implant surface. Chlorhexidine rinses are used to further reduce the bacterial load. Antibiotics are used to reduce the bacterial load and control the infection.

The choice of treatment depends on the severity of the disease, the location of the implant, and the patient’s medical history. Treatment success rates vary from 40% to 100%, with long-term success rates ranging from 30% to 70%.

CONCLUSIONS

Peri-implantitis is a complex and multifactorial condition that requires a comprehensive approach to treatment. The success of treatment depends on the severity of the disease, the location of the implant, and the patient’s medical history. Long-term success rates vary, and ongoing monitoring and maintenance are essential for successful treatment.

REFERENCES