



CAN PROPER AWARENESS MAKE PERIODONTAL TREATMENT COST EFFECTIVE? A CASE REPORT

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ABSTRACT

This case report, describes the successful treatment of a 46-year-old patient with chronic periodontitis and gingival overgrowth, by nonsurgical periodontal therapy along with systemic antibiotic. This report is mainly directed to discuss about how lack of awareness and wrong oral hygiene practice can lead to progression of the disease, thereby increasing the treatment plan more challenging both for the clinician and the patient as well. Early diagnosis and home care maintenance of periodontal health should be prioritized making the treatment procedure and the outcome more favorable.

KEYWORDS : nonsurgical periodontal therapy, awareness, early diagnosis.

INTRODUCTION:

This study has clearly established that gingival inflammation was a risk factor for tooth loss. This study has clearly established that gingival inflammation was a risk factor for tooth loss. This study has clearly established that gingival inflammation was a risk factor for tooth loss. Numerous studies and literatures have clearly established that gingivitis and periodontitis are predominantly responsible for tooth loss and various other oral conditions. These diseases not only affect the health but even the psychological and social wellbeing of the patient. Studies, by Genco et al, have shown that, adult subjects under financial strain and exhibiting poor coping behaviour were reported to be at increased risk for severe periodontitis.¹ Periodontitis with inadequate stress behaviour strategies (defensive coping) were suggested to be a higher risk for severe periodontal diseases.²

Treatment aspect of gingivitis and periodontitis include both surgical and non-surgical procedures along with home care. The American Academy of Periodontology guidelines suggest that periodontal health should be achieved in the least-invasive and most cost-effective manner possible.³

Scaling and root planing alone often suffice as definitive therapy, arresting the disease process and restoring health, comfort and function.⁴

Here we present a case of a middle-aged male patient (46 years) with frank gingivitis (gingival overgrowth) and localized periodontitis.

CASE:

The subject presented with a chief complaint of "swollen gums" and "gum bleeding", along with bad mouth odour which made him difficult to interact socially. There was no associated pain. Mild inflammation was noticed 8 months back, and it gradually increased to its present size.

Clinical examination revealed generalised plaque induced gingival enlargement, with a very poor oral hygiene. On probing, the pocket depth showed approximately 5-mm pseudopocket (generalised). On taking detailed history, the patient revealed that he had stopped using a toothbrush around 5-6 months back, from the time he noticed bleeding from gingiva. Systemic examination and history revealed controlled hypertension. On further interaction, it could be stated that he belonged to a low socio-economy group, and thus it made him inaccessible to various aspects of a complete treatment regimen.

After careful examination and history, the treatment planning was

done. At first the patient was made aware of a proper oral hygiene maintenance process, wherein he was explained about the drawbacks of not using a toothbrush and also explained about proper brushing technique. Following this, and attaining proper patient cooperation and compliance, it was decided that a nonsurgical treatment will be carried out consisting of scaling and root planing along with home care. The patient received an antibiotic coverage during the procedure (Combination of Metronidazole 400mg and Ciprofloxacin 500mg twice daily for 8 days).⁵

In a one month follow up, the patient showed considerable improvement in the status of his oral health as well as reduction in the gingival inflammation. It can be safely assumed that there was a significant boost in the subject's self-esteem as well.

DISCUSSION:

There are innumerable case reports and literatures, claiming the benefits of non-invasive and conservative approach over that of surgical methods. With this case report, we have tried to highlight certain aspects of the periodontal treatment approach towards a major group of the society which are otherwise deprived of a satisfactory treatment plan due to various reasons.

Periodontal disease presents multi-factorial aetiology.⁶ The main risk factors for its progression are the presence of plaque, calculus and gingivitis, although many studies have shown that these clinical factors alone are not sufficient for loss of attachment to appear.⁷

In the present paper, the foremost matter of discussion is lack of awareness regarding maintenance of a good oral health and its impact on systemic and psychological well-being. People often neglect oral health, but seek medical care as required. However, it is not realized that poor periodontal health can be a cause for the deteriorating systemic health of the individual. Many misconceptions about routine oral hygiene are prevalent among general public, like in the present case where the subject stopped using toothbrush due to bleeding gums, which lead to worsening of the disease.

The second issue to be discussed is the lack of treatment options to certain groups of people in the society. Author Rainer Buchmann, in his book "**Economic Periodontal and Implant Dentistry**", has clearly mentioned about the problems related to providing a good and complete treatment to people belonging to low socio-economy groups. They have been deprived of periodontal treatment due to various factors like lack of awareness about the disease, limited number of practitioners who can provide a thorough periodontal

and last but not the least, lack of affordability³. In the present case scenario, history given by the patient stated that one of the reasons that he avoided to visit a dentist was because he feared, that he wouldn't be able to bear the treatment cost. This lead to a delayed treatment, which kept increasing the disease process over the time.

In this case the subject was put under an antibiotic coverage, and was advised to strictly follow the home care oral hygiene methods. Systemic antibiotics, along with non surgical scaling and root planning methods, proves to be more effective as, it enters the periodontal tissues and periodontal pocket via serum and can potentially suppress periodontal pathogen in other oral surfaces.

At a one month follow up, the patient showed fair compliance with a considerable improvement in the gingival status than the condition with which he had once presented with.



Figure: column A. showing preoperative gingival status, column B. showing gingival status after 1 month of a nonsurgical periodontal therapy with noticeable improvement in gingival status and fair home care (oral hygiene maintenance by the patient).

Thus the purpose of this paper, is taking into consideration, the lack of awareness about periodontal health, its early detection, practicing proper personal oral hygiene methods and accessibility of periodontal treatment modalities to maximum number people in the society. A small step towards a big cause might prove beneficial in many aspects and will improve the state of periodontal health of a major group of people in the society.

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