An Overview Of Treatment Of Gingivitis In Child, Role Of Dentist And Pharmacist In Management

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Abstract

It is possible to effectively treat the inflammatory components of plaque-induced gingivitis and chronic periodontitis for the majority of patients by implementing a plaque management program, performing nonsurgical and/or surgical root debridement, and continuing to perform periodontal maintenance operations. Depending on the condition, more treatment procedures can be required. It is possible for the clinician to make use of all of the therapeutic modalities that have been discussed in this position paper at various points in time during the long-term management of the patient's periodontal health. This brings up the role of the physician in conjunction with the dentist in the management of gingivitis in juvenile patients.

Keywords: *gingivitis*, *periodontal health*.

Introduction

Gingival illnesses are quite common in children and have the potential to progress to the point where they put the periodontium of an adult in jeopardy. Most of the time, the effects of periodontal illnesses that are seen in adults begin to manifest themselves at an earlier stage in life. When it comes to the early recognition and diagnosis of gingival and periodontal disorders, dental practitioners, along with the pharmacist, have a significant role to play in order to maximize the effectiveness of therapy [1].

Both the American Academy of Pediatric Dentistry and the American Academy of Pediatrics suggest that newborns be scheduled for an initial oral evaluation appointment between six months of the emergence of the first primary tooth, but no later than twelve months of age [2]. This examination should be planned as soon as possible. According to studies, despite the fact that recommendations have been made, ninety percent of infants in the United States have visited a primary care provider, but only two percent have been evaluated for their dental health before the age of one. In addition, a study that was conducted in 2008 indicated that children who were covered by public insurance had a 1.7 times greater likelihood of having untreated dental caries compared to children who were not enrolled in state or federal health insurance programs [3].

A dental home should be established for children by the time they are 12 months old, according to

the American Academy of Pediatric Dentistry, which strongly advocates this practice. This will help increase access to oral health treatment and eliminate oral health disparities in children. Children who have access to a dental home are able to receive the preventative oral health care that is necessary and can also be evaluated for oral disease during the early stages, which is extremely important. On the other hand, solely concentrating on the construction of a dental home as a viable measure to minimize caries has not been well supported with enough evidence and may not be a strategy that is realistic [4].

It is common practice for pediatric patients to visit non-dental health care providers (such as pediatricians and pediatric nurse practitioners) at an earlier age. This finding highlights the significance of providing primary health care workers with training in the identification of oral health disorders and the provision recommendations that are both appropriate and timely [5]. The provision of preventive oral healthcare advice has traditionally been the preserve of dental health professionals; a situation that has been established over the years as a result of the differing training, clinical practice and healthcare delivery systems that exist between dental care and other aspects of healthcare [5].

Review:

In affluent countries, the prevalence of gingivitis was approximately 73% among children between the ages of 6 and 11 years old. Between the ages of six and eleven, this rate increases at a faster rate. During adolescence, the incidence of gingivitis becomes significantly more prevalent, according to the findings of a number of studies. There appears to be an increase in the prevalence of gingivitis during the adolescent years, with rates ranging from fifty percent to ninety-nine percent. On average, girls have a lower incidence of gingivitis compared to boys, which is likely due to the fact that girls have higher levels of oral hygiene [6].

It is crucial to one's overall health and quality of life to maintain good oral health. If an individual is free from any diseases or disorders that prevent them from biting, chewing, smiling, speaking, and having psychosocial well-being, then they are considered to be free from these conditions. In spite of the fact that the vast majority of oral disorders do not pose a threat to one's life, the repercussions of poor oral health can have an impact on one's quality of life. A burden has been placed on the community as a result of the high expense of dental treatment, particularly among persons who disadvantaged economically and socially disadvantaged [7]. It is anticipated that the expenditures made in Malaysia for oral healthcare services in 2015 amounted to RM401.2 million, which is equivalent to around 3.4% of the overall expenditures made for national health care. Community pharmacists may be encouraged to play a more active part in the promotion of oral health through the use of interprofessional teamwork between dentists and pharmacists. The provision of information and help for self-care and the utilization of overthe-counter (OTC) items for minor issues pertaining to oral health has the potential to significantly reduce the dental costs of consumers and to improve the quality of patient care within the Malaysian health-care system [8]. When it comes to the provision of primary health care services, community pharmacies are an indispensable participant. As a result of their convenient accessibility and their location in the heart of the community, they have the potential to be the first health care providers to interact with the general people in relation to oral health [9].

As a result of the considerable changes that are taking place in the position of the pharmacist, the role has expanded beyond the simple responsibilities of compounding and dispensing to encompass a wider variety of functions that are associated with primary care. A more active and integrated role for pharmacists in the preventative services provided by the National Health Service (NHS) has been explored. This position would involve aiding patients in self-monitoring their blood glucose levels and blood pressure levels, among other things. Patients who suffer from noncommunicable diseases can receive pharmaceutical consultation from them, and they can assist in increasing patients'

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compliance and adherence to drug therapy [10]. Community pharmacists may also facilitate the implementation and delivery of prevention, early intervention, and referral services for oral health, with the goal of reducing the prevalence of potentially preventable oral disorders such as tooth decay, gum disease, and oral cancer. This can be accomplished through the utilization of community pharmacies as optimal health care destinations. As a result of the fact that they are trustworthy, competent, and well-respected health-care experts, the personnel at community pharmacies play an essential part in providing quality medical treatment to individuals of all ages and stages of life [10].

The gingivitis that is connected with the eruption of teeth is quite common. The eruption of teeth, on the other hand, does not generate gingivitis. Due to the fact that maintaining oral hygiene may be challenging or even unpleasant, it is possible that this condition is brought on by an increased likelihood of plaque formation in regions where primary teeth are falling out and permanent teeth are emerging [11]. The inflammation causes the gingival margin to appear more prominent than it normally would be, giving the impression that the gingiva has grown far larger than it actually is. During fixed appliance therapy, the ability to brush teeth between the proximal and interproximal areas is significantly diminished. When teeth are banded into place rather than glued, the problem becomes even more apparent. The transfer of supragingival plaque deposits into a subgingival region is accomplished with the use of tipping action. On the other hand, motions of the body are less likely to cause a displacement of supragingival plaque. Therefore, gingival alterations can occur anywhere from one to two months after the installation of the device, and they are typically temporary [12].

Bleeding, collagen degradation, and swelling of the gingival connective tissue are all symptoms of a lack of vitamin C in the gastrointestinal tract. In most cases, the involvement is restricted to the papillae and the marginal tissues [13]. In addition to having a smooth and shiny surface, gingiva is bluish in color, soft, and friable. Hemorrhage that occurs either spontaneously or after a minor stimulus. The creation of infarcts in the capillaries that supply the gingiva can lead to surface necrosis, which is accompanied by the production of pseudomembrane and necrosis [13].

In most cases, the Epstein-Barr virus is responsible for development the mononucleosis, which is a condition that mostly affects children and young people [14]. Common signs and symptoms include fatigue, malaise, headache, fever, sore throat, swollen tonsils, and lymphadenopathy. The clinical symptoms are especially noticeable in young adults. Other common signs and symptoms lymphadenopathy. include Gingival hemorrhage, petechiae of the soft palate, and ulceration of the gingiva and buccal mucosa are some of the changes that can occur in the oral cavity. The presence of palatologic petechiae is typically observed prior to the manifestation of systemic symptoms [14].

Conclusion:

Gingivitis is a condition that frequently affects youngsters and is often considered to be a risk factor for the development and progression of diseases that affect the parodontal tissues. For this reason, it is essential to respond in a timely and appropriate manner in order to forestall the disease from progressing to a more severe stage and causing parodontopathy.A considerable reduction in gingivitis was observed as a consequence of the chlorhexidine treatments, in contrast to the placebo rinse. Despite the fact that some people who used chlorhexidine experienced superficial mucosal desquamations, these lesions were only temporary and did not cause any discomfort. Despite the fact that the individuals saw an increase in cosmetic side effects such as tooth discoloration and supragingival calculus, the gingival health of the subjects did not suffer as a result. In two studies that lasted for ten and twelve weeks, the use of a chlorhexidine rinse twice daily and as an addition to routine oral hygiene measures was found to be of significant value in the treatment of gingivitis in children.

Reference

- [1] American Academy of Pediatric Dentistry Guideline on periodicity of examination, preventive dental services, anticipatory guidance/counseling, and oral treatment for infants, children, and adolescents. Pediatr. Dent. 2010;32:93–100.
- [2] Brickhouse T.H., Rozier R.G., Slade G.D. Effects of enrollment in medicaid versus the state children's health insurance program on kindergarten children's untreated dental caries. Am. J. Public Health. 2008;98:876–881. doi: 10.2105/AJPH.2007.111468.
- [3] American Academy of Pediatric Dentistry Policy on the dental home. Oral Health Policies Recomm. 2018;40:29–30.
- [4] Douglass J.M., Clark M.B. Integrating oral health into overall health care to prevent early childhood caries: Need, evidence, and solutions. Pediatr. Dent. 2015;37:266–274.
- [5] Casamassimo P.S., Seale N.S. Educating general dentists to care for U.S. children: How well are we doing and what can we do better? J. Calif. Dent. Assoc. 2014;42:779–783.
- [6] Hallas D., Shelley D. Role of pediatric nurse practitioners in oral health care. Acad. Pediatr. 2009;9:462–466. doi: 10.1016/j.acap.2009.09.009.
- [7] US Department of Health and Human Services . Oral Health in America: Report of the US Surgeon General (Executive Summary, Part Five) National Institute of Dental and Craniofacial Research, US Public Health Service; Washington, DC, USA: 2000.
- [8] Cooper D., Kim J., Duderstadt K., Stewart R., Lin B., Alkon A. Interprofessional oral health education improves knowledge, confidence, and practice for pediatric healthcare providers. Front. Public Health. 2017;5doi: 10.3389/fpubh.2017.00209.
- [9] Shelley D., Mevi A., Abu-Rish E., Haber J., Hirsch S. Preliminary steps toward creating an interprofessional international public health program. J. Interprof. Care. 2009;23:417–419. doi: 10.1080/13561820802561378.

- [10] Havdar SG, Tercan A, Uckan S, Gurakan B.L. Congenital gum synechiae as an isolated anomaly: a case report. ClinPediatric Dent. 2003;28(1):81–83.
- [11] DeAngelo S, Murphy J, Claman L, Kalmar J, Leblebicioglu B. Hereditary gingival fibromatosis a review. Compend Contin Educ Dent. 2007;28(3):138–43.
- [12] Ongole, Praveen B N. Textbook of Oral Medicine, Oral Diagnosis and Oral Radiology. India: Elsevier; 2010. p. 523. Chapter 19, Periodontal Diseases
- [13] Califano JV. American academy of periodontology- Research, Science and Therapy committee. Periodontal diseases of children and adolescents. J. Periodontol. 2003;74:1696–704.