Reducing allergic symptoms through eliminating subgingival plaque

Abstrak:

Background: Elimination of subgingival plaque for prevention and treatment of periodontal diseases through scaling is a routine procedure. It is also well-known that periodontal disease is related to systemic diseases. Nevertheless, the idea how scaling procedures also able to reduce allergic symptoms i.e. eczema and asthma, is not easily accepted, because it is contradictory to the "hygiene hypothesis." However, since allergic symptoms also depend on variable factors such as genetic, environmental and infection factors; every possible effort to eliminate or avoid from these factors had to be considered. Subgingival plaque is a source of infection, especially the Gram-negative bacteria that produced endotoxin (lipopolysaccharides, LPS), a potential stimulator of immunocompetent cells, which may also related to allergy, such as mast cells and basophils. In addition, it also triggers the "neurogenic switching" mechanism which may be initiated from chronic gingivitis.

Objective: This case report may explain the possible connection between subgingival plaque and allergy based on evidence-based cases. Case: Two adult siblings who suffered from chronic gingivitis also showed different manifestations of allergy that were allergic dermatitis and asthma for years. They were also undergone unsuccessful medical treatment for years. Oral and topical corticosteroids were taken for dermatitis and inhalation for asthma. Case Management: Patients were conducted deep scaling procedures, allergic symptoms gradually diminished in days even though without usual medications. Conclusion: Concerning to the effectiveness of scaling procedures which concomitantly eliminate subgingival plaque in allergic patients, it concluded that this concept is logical. Nevertheless, further verification and collaborated study with allergic expert should be done.

Keyword:

allergic symptoms, scaling, subgingival plaque