Editorial

Oral Infections and Systemic diseases

Oral health is part of systemic health, however medical and dental clinicians treat the oral cavity as if it is a separate entity from the rest of the body. An interrelationship between oral health and systemic health exists but causality is yet to be understood and proven. Inflammation and infections in the oral cavity are not confined to the mouth and can affect other areas of the human body. A growing body of evidence points to a wide range of systemic disorders that are associated with periodontal diseases. The association between oral microbial infection and systemic disease is not a new concept. Herzberg reported that Assyrians proposed the effect of oral health on the rest of the body as early as the seventh century B.C[1]. The concept that periodontal disease might influence systemic health is also not new. "Focal infection theory" was introduced in 1891 suggesting that microorganisms or their waste products obtain entrance to parts of the body adjacent to or remote from the infection. Other proponents of this theory blamed oral foci of infection for a number of regional and systemic diseases, ranging from tonsillitis and middle ear infections to pneumonia, tuberculosis, syphilis, osteomyelitis, endocarditis, meningitis, and septicemia.[2]. The "Focal infection theory" was not given any attention until recent progress in identification and characterization of periodontal pathogens, as well as elucidation of potential systemic mechanisms of action of bacterial products and inflammatory biomarkers have opened the way for a more realistic assessment of the systemic importance of periodontal disease. Epidemiological and microbiological-immunological studies have lent credence to the concept that periodontal disease may be a separate risk factor for cardiovascular disease and respiratory disease, poor glycemic control as well as delivery of low-birth-weight infants, and rheumatoid arthritis.[3,4,5,6] The number of reports associating oral infections with systemic diseases has been increasing steadily in the last few years [7]. Cross-sectional and case control studies indicate that periodontitis may confer two to seven fold elevations in risk of CVD and premature low birth weight babies[8]. Most of the reports are based on epidemiological studies. However the confounding issue is that oral infections often are only one of the many important factors that can influence systemic diseases[2] Epidemiological/biological evidence related to the relationship between oral disease and following systemic conditions have been extensively studied.

1. Cardiovascular disease
2. Diabetes mellitus
3. Pregnancy factors: low birth weight/pre-term delivery
4. Respiratory diseases
5. Osteoporosis
6. Rheumatoid arthritis

Having recognized the importance of good oral health and existing evidence on the role of oral/periodontal diseases in systemic conditions, there is a need to explore this further and

share information to deal with the misconceptions and biases in this regard. At the present level of evidence, it is hard for anyone to be against good oral health. If a causal relationship is found, we shall already be ahead of the game in regards to our systemic health. If there is no relationship, we shall have a healthy mouth that will benefit our overall well-being.

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