Endodontic infection and systemic health

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The relationship between oral infections and systemic alterations has been increasingly explored in medical-dental research. The most prevalent oral infections shared by the overall population are endodontic infection and periodontal disease. However, infection of endodontic origin, its consequences for periapical tissues, and its systemic repercussions have not been scientifically explored, especially in association with some systemic disorders.

Bacteria present in the oral cavity may take part in the etiopathogenesis of other diseases, either by migration of bacteria to an extraoral infection site or the establishment of a chronic systemic inflammatory condition, as a result of infection in the mouth. Recent scientific evidence suggests infection of endodontic origin may interfere in one's systemic health by means of those two mechanisms, mainly through continuous release of several chemical mediators and inflammation byproducts.

High concentrations of these substances in blood plasma during extended periods may influence the beginning or progression of other diseases. Currently, it seems to be clear that serial extraction therapies, considered as an alternative for the treatment of systemic disorders, are outdated. On the other hand, it is necessary to improve knowledge on such correlation, for the way it is established has not been defined yet. Perhaps the answer relies both on the type of manifestation and to which extent this local alteration may have some impact on one's systemic health or in further regions.

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Therefore, studies that aim at correlating oral infections with systemic alterations, and vice versa, are rendered necessary and of utmost scientific relevance. Embracing studies on local infection development and dissemination routes to the organism, as well as the influence of different systemic alterations in the development and maintenance of local infection is a vast horizon yet to be explored.

Thus, despite facing several recent discoveries, the correlation between endodontic infection and systemic health is yet to be better elucidated in order to taking efficient action to promote the overall population's health. This path will surely lead to improvements in quality of life, for an interdisciplinary approach among doctors and dental surgeons in its totality unfortunately is not yet a reality in Brazil.

Luciano Tavares Angelo Cintra – guest editor

Universidade Estadual Paulista Júlio de Mesquita Filho (UNESP), School of Dentistry, Araçatuba, São Paulo, Brazil.