

Nordic theme:

Association between oral infections and general health

Over the past 30 years, the association of chronic oral infections with an elevated risk of general diseases outside the oral cavity has been in the focus of increasing research interest. On a hypothetical level, as many as 57 different general health problems have been linked to periodontitis. In the current decade, the impact of endodontic infections on general health has also begun to be investigated. Although the importance of oral health for a functional dentition and its maintenance is well known, the emerging scientific evidence of the association between oral infections and general health has sparked exceptional interest in the media and among patients. The aim of the series of articles under this theme is thus to review the current knowledge on the subject, which we hope will benefit clinical patient care.

The series consists of seven review articles. As oral health is the result of interaction between the microbiome and the host, one of the articles focuses on the role of the oral microbiome in general health. This field of science is progressing rapidly thanks to new technological advances. Little is known about the significance of the oral microbiome for the microbiological balance of the body; however, the microbiome as a whole is of crucial importance for human immunology, metabolism and hormonal regulation.

Three of the articles deal with the most common diseases where periodontitis is suspected to be a predisposing factor: diabetes, cardiovascular diseases and rheumatoid arthritis. The most extensive research is on diabetes and cardiovascular disease, and periodontal treatment is expected to have a positive effect on the disease course. However, none of these associations have been investigated with large-scale treatment studies that would allow establishing causal relationships. Shared heritability linking the disorders has not shed any additional light on the matter, either.

One of the articles under this theme takes up the potential significance of endodontic infections in general diseases. Here as well, diabetes and cardiovascular diseases have been most studied. Evidence on the connection of these diseases is still scarce as only single studies have been published on the general health effects of endodontic infections and their treatments.

As the onset of chronic oral infections typically occurs in childhood, one of the articles focuses on the challenges and responsibilities associated with paediatric dentistry. There is also an article discussing the historic, science philosophical, ethical, and social issues associated with the links between oral infections and general health. Fortunately, the artificial split between oral health and general health is beginning to disappear as both dentists and physicians work every day with a simple goal in mind: promoting health.

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