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RELATIONSHIP BETWEEN PERIODONTITIS AND MYOCARDIAL INFARCTION

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Epidemiologic and pathologic studies suggest that only half to two thirds of cardio vascular risk is explained by the classic risk factors. Myocardial infarction (MI), known as "heart attack," is caused by decreased or complete suspension of blood flow to a part of the myocardium. The majority of myocardial infarctions are attributed to coronary artery disease. However, traditional risk factors for this condition fail to account for all clinical and epidemiological aspects. Periodontal disease, a chronic Gram-negative oral infection, comes out as a potential contributor to cardiovascular events. This narrative review summarize the current status of epidemiological and mechanistic studies on the presence of myocardial infarction in patients with periodontitis in order to elucidate the effect of periodontitis on the progress of myocardial infarction.

Aim: review the literature and establish the relationship between periodontitis and myocardial infarction.

An analysis of literature on the issue of periodontitis in patients with myocardial infarction was carried out and 14 patients were examined at the Department of Periodontology.

There are a significant relationship between the state of periodontal tissue and myocardial infarction. Results showed that the absence of teeth of more than 10 and severe periodontitis are great risk factors for myocardial infarction (MI). Events occurring during periodontal disease have been considered a consequence of higher concentrations of different pro-inflammatory cytokines, which has been evidenced by the high levels of this type of cytokines found in diseased periodontal tissues, or gingival crevicular fluid (GCF) of periodontitis patients. Also increases in cytokines have been associated with vascular dysfunction and vascular diseases such as atherosclerosis and hypertension.

The results show the presence of significant relation between periodontitis and MI. It is crucial for physicians to not forget and consider the state of oral health when dealing with heart-related diseases. If there are any suspected cases of oral tissue inflammation or periodontal disease, the physician must refer the patient to the periodontist for further evaluation and treatments such as scaling, oral health instruction and other complementary treatments like local antibiotic therapy or antiseptic mouthwashes.