Periodontal disease in rheumatoid arthritis and Sjogren's syndrome: a modifiable risk factor for atherosclerosis?

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Autoimmune conditions like rheumatoid arthritis (RA) and Sjogren's syndrome (SS) are associated with accelerated atherosclerosis [1, 2]. Although chronic inflammation may potentiate the effects of other well-known cardiovascular (CV) risk factors such as dyslipidemia, it is now clear that the disease itself represents an independent risk factor for CV disease not only because of chronic inflammatory process but also due to humoral and cell-mediated immune mechanisms. Patients with SS and RA are at a higher risk of having periodontitis (PD) than healthy controls and they have significantly increased periodontal attachment loss compared to controls [3, 4]. Micro vascular periodontal alterations may play a crucial part in the development of periodontal disease in RA patients and in those with SS, salivary B-cell activating factor (BAFF) is implicated in the pathogenesis [5, 6].

Interestingly, chronic inflammatory and microbial burden caused by the dental plaque in patients with PD is also thought to predispose to atherosclerotic process. There is emerging evidence that severe PD is associated with sub-clinical atherosclerosis in even young, otherwise systemically healthy patients [7]. From this available evidence, it can be assumed that RA and SS patients with PD are at a higher risk of developing premature atherosclerosis when compared to those without PD. We need more studies to confirm or refute this assumption and if this association is proven, an important sub group of these patients who needs aggressive modification of CV risk factors can be identified.

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