Is Common Risk Factors & Inflammatory Receptors Cardiovascular Disease and Periodontitis?

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Periodontal disease, a common chronic oral inflammatory disease is characterized by destruction of soft tissue and bone of tooth. Atherosclerosis starts early in life, since disease progression is usually slow, clinical symptoms or hospitalization on are rare before 40 years of age. 1,2 Recent research has yielded conflicting data regarding the relationship between dental disease, particularly periodontitis and cardiovascular disease. There is plausible theoretical basis for such a link, as increased levels of inflammatory mediators may increase the risk of atherosclerotic plaque formation. The crucial casual relation might be established by prospective treatment studies, which elucidate the connection between treatment of poor health and systemic inflammatory marker³⁻⁴. It is becoming increasingly clear that infections and chronic inflammatory conditions such as periodontitis may influence the atherosclerotic process. The crucial casual relation might be established by prospective treatment studies, which elucidate the connection between treatment of poor health and systemic inflammatory marker³⁻⁴. Haemostatic and rheological variable are associated with both prevalent and incident cardiovascular disease, and may be mechanisms through which risk factors such as smoking, hyperlipidemia and infections may promote vascular events. Low grade chronic infections are increasingly being recognized as potential instigators of systemic diseases. Periodontal disease manifests as a prevalent chronic infection impinging throughout the entire adult life in a significant proportion of the population and is probably a significant risk factor for cardiovascular disease in the population as a whole and particularly in certain groups.5 The debate about whether

periodontal disease is a risk factor for cardiovascular disease is interesting, but still unresolved. Current evidence is insufficient to unequivocally support the premise that dental infections constitute an independent risk factor for cardiovascular disease. However, the deposition of atherematous plaque in the coronary arteries may be associated with many other infections in addition to periodontitis. As long as the mechanism of cardiovascular remains obscure, it will be difficult to determine the real relationship between oral and cardiovascular disease. But according to me these two diseases may have resulted from the presence of common risk factors as well & inflammatory receptors. Therefore, evidence for potential association between oral and systemic disease must be carefully reexamined to distinguish potential confounding factors from other risk factors before treatment with the aim of preventing or treating cardiovascular disease can be justified.

References

- Beck J, Garcia R, Heiss G. Periodontal disease and cardiovascular disease. J Periodontol 1996; 67: 1123-1137.
- 2. Joshipura KJ, Wand HC, Merchant AT, Rimm EB. Periodontal disease and biomarkers related to cardiovascular disease. J Dent Res 2004; 83: 151-155.
- 3. Rai B, Anand SC, Kharb S, Panoramic radiograph as a detective of cardiovascular risk. World J Med Science (accepted).
- 4. Buhlin K, Gustafsson A, Hkansson J. Oral health and cardiovascular disease in Sweden. Results from a national questionnaire survey. J Clin Periodontol. 2002; 29: 25-259.
- Iwamoto Y, Nishimura F, Soga Y, Takeuchi K, Kurihara M, Takashiba S. Oral health and peripheral arterial disease. Circulation 2003; 107: 1152-1157.

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