



## **AAOSH Response to *AHA Scientific Statement on the Relationship between Periodontal Disease and Atherosclerotic Vascular Disease***

April 30, 2012

The medical and dental scientific communities along with their industry stakeholders and the public media at large have been justifiably intrigued for many years by the proposed connections that exist between oral inflammation and the general health of the body. Specific to this interest is the alleged associations between periodontal disease and atherosclerotic vascular disease.

AAOSH is concerned that the headlines, public statements and media reports arising from the American Heart Association's release of its Scientific Statement concerning the proposed connections between vascular disease and periodontal disease, misstate the actual findings and statements contained within the study itself.

Furthermore, the headlines and news coverage about the Scientific Statement have regrettably added confusion to these understandings within the medical-dental scientific community, the media and within the public at large. While the actual reviews have not altogether disagreed with the major premise of the study's conclusions (i.e. that there was no periodontal-induced causation for vascular disease), many headlines (such as found on the American Dental Association's newsroom website<sup>1</sup>) are in our view misleading and potentially damaging, especially with audiences who would miss or disregard the finer points and conclusions of the study itself.

We are concerned that these incongruities and misstatements, if left to stand, will damage the momentum and forward progress achieved to-date in raising greater interest and understandings in these medical associations, and in the importance of building closer interdisciplinary relationships between medicine and dentistry for the benefit of our mutual patients and the public at large.

We believe that all related professional and industrial stakeholders interested in this discussion and its related ramifications have a responsibility to speak accurately about these medical-based relationships and associations. We understand the importance of and encourage the guiding and governing of this information and the messages arising therefrom for professional and public consumption. However such messages should not understate, overstate or misrepresent the data.

Accordingly, health professions, scientific communities and as noted in the AHA Statement itself - all professional and industrial stakeholders, should not understate or overreach claims about the significance of the perio-heart connections, either to further their own interests, or to provide distance

or cover for malpractice protection, or to unduly control the public and professional conversation or direction of ongoing research, or to manipulate the marketplace in any manner.

We agree in substance with statements made by the American Academy of Periodontology that “the lack of causal evidence should not diminish concern about the impact of periodontal status on cardiovascular health.”<sup>2</sup> We believe the preponderance of extant literature is sufficient to warrant continued interest in and research about the associations between periodontal disease and vascular disease. Indeed, we agree with the conclusions inside the AHA Scientific Statement and the clarifying comments made following its publication by two of its co-authors<sup>3</sup> that periodontal disease is associated with vascular disease “independent of known confounders”, which means that common risk factors do not completely explain this relationship and that periodontal disease contributes independently to risk for atherosclerotic vascular disease.

Additionally, as stated within the abstract itself, the authors of this study declare that the literature to date “support an association between PD and ASVD”, and that “periodontal interventions result in a reduction in systemic inflammation and endothelial dysfunction.”<sup>4</sup>

We do not believe that consideration of periodontal disease as a contributing risk factor detracts attention from traditional risk factors. On the contrary, we believe the literature supports the conclusion that like any other medical condition which increases total body inflammatory burden, that periodontal-based inflammatory burden is not only a logical and appropriate risk factor to consider in any scientific or clinical situation, but one that should be responsibly considered in the overall equation of health. We believe that public statements claiming that the research does not support the connections or which diminish the significance of the wide amount of literature showing links between the two conditions, is neither accurate nor helpful and in fact potentially harmful to the public good.

AAOSH calls upon the American Heart Association, the public press and those reporting on the findings of this study, to offer a measured clarification in these matters, creating a congruent message that more accurately reflects the findings and conclusions of the study and which do not overreach the substance of the study itself in the headlines, the message or any content meant for public and professional consumption.

In our view, owing to the profound consequences and complications of cardiovascular disease on our society, including the substantial loss of life and treasury, and knowing the impact that oral health has on total body inflammatory burden, we cannot hold back our efforts to assess and/or treat periodontal disease while waiting for definitive possession of causality data.

Knowing the impact of inflammation, both physicians and dentists should be equally interested in reducing inflammation from all sources and should not pull back from building cooperative interdisciplinary networks which co-manage their mutual patient’s health, as was established in the Consensus Report jointly published by the American Academy of Periodontology and the American journal of Cardiology.<sup>5</sup> At a minimum, as the AHA Statement documents, good oral health lowers inflammatory burden and endothelial dysfunction. Therefore it should be included in any treatment plan which supports an overall healthy lifestyle as well as in any professional treatment plan to this end.

As noted, we agree with the AHA in its review of existing studies that there is no demonstrated cause-and-effect relationship between periodontal disease and vascular disease. Any definitive statements for the presence or absence of a causal relationship should be held in reserve until such information becomes available.

News coverage about the AHA Scientific Statement has regrettably added to the confusion about this issue, something AAOSH and its members fear will damage the progress achieved to date in building more interdisciplinary awareness of the importance of medical-dental co-management of people with either disease.

AAOSH recognizes that there is a preponderance of studies demonstrating the plausible linking of these two diseases, as well as that there are other studies which fail to show a relationship. However, we hold that the absence of proof of connection, does not establish definitive proof of no connection, as some might claim. For this reason we call upon our respected research community to continue forward in the scientific march toward consensus and better understanding, as well as call upon other professional organizations to make every effort to support the substance of these studies. As outlined herein, we ask the media and all professional and industry stakeholders with vested interest in this discussion and debate to fairly represent these matters and to not over or understate what we presently know.

We thank the American Heart Association for this well documented review of the literature and for its storied history in battling cardiovascular disease of all types. We join with them in calling for further research and better understandings that will save lives and help all citizens enjoy better health. We welcome any and all efforts to bring medicine and dentistry closer together.

We invite all health professionals to join with the American Academy for Oral Systemic Health and the Cleveland Clinic Wellness Institute at the Cleveland Clinic, June 22-24, 2012 for the 2<sup>nd</sup> Annual Scientific Session. Leading authorities from the Cleveland Clinic and from across medicine and dentistry will further discuss the state of this science and how to improve patient care.

The American Academy for Oral Systemic Health is an organization of health care leaders and health professionals dedicated to the relationship of oral health and whole body health. Its vision is to improve inter-disciplinary healthcare and collaboration, and the health of people everywhere by changing public and professional awareness of the mouth-body health links.

Further information is available at [www.AAOSH.org](http://www.AAOSH.org)

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<sup>1</sup> <http://www.ada.org/news/6984.aspx> (ADA Statement, accessed April 27, 2012).

<sup>2</sup> <http://www.perio.org/consumer/AHA-statement.htm> (AAP Newsroom Statement, accessed April 30, 2012).

<sup>3</sup> <http://www.cumc.columbia.edu/news-room/2012/04/healthy-mouths-and-healthy-hearts-still-go-together/> (Accessed April 27, 2012).

<sup>4</sup> <http://circ.ahajournals.org/content/early/2012/04/18/CIR.0b013e31825719f3.full.pdf+html> (Accessed April 27, 2012).

<sup>5</sup> <http://www.joponline.org/doi/pdf/10.1902/jop.2009.097001> (Accessed April 27, 2012).