## Letter to the Editor



# Periodontal Disease as a Potential Risk Factor for Acute Coronary Syndromes

#### To the Editor:

I would like to congratulate Accarini e Godoy¹, authors of the article "Periodontal Disease as a Potential Risk Factor for Acute Coronary Syndromes (Arq Bras Cardiol 2006; 87:592-6), a subject still underexplored in the medical literature. I have noted the authors' concern in classifying periodontal disease (PD) as accurately as possible, using several definitions since a universal standardization is still lacking. PD was found to be associated with obstructive coronary disease, and therefore should be regarded as a risk factor for the development of coronary artery disease (CAD). However, it would be interesting if Accarini described the presence of other risk factors for CAD in the sample studied, to assess precisely the relevance of periodontitis as a risk factor, either alone or associated with other well known risk factors.

Considering the association between PD and CAD<sup>2</sup>, and also that PD prevention and treatment may be routinely carried out by health services, I believe that oral cavity examination should be part of cardiovascular risk assessment in middle-aged patients, particularly those of intermediate risk, when more expensive methods (such as high-sensitivity CRP)<sup>3</sup> are not usually available in the clinical practice.

### José Fernando Vilela Martin

Faculdade de Medicina de São José do Rio Preto São José do Rio Preto, SP vilelamartin@cardiol.br

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#### The authors reply:

We appreciate the important comments made by JFV Martin on our work<sup>1</sup>. We should like to point out that, although collected, the classic risk factors were not studied specifically because the study was on patients that already presented acute coronary syndromes and, therefore, would have, on a broad scale, associations with said factors.

With respect to the eminent commentator's request, we

inform that the body mass index, total cholesterol and its fractions (HDL, LDL, and VLDL), as well as serum triglyceride levels and fasting glucose, were treated as quantitative variables and compared using the Kruskal-Wallis test in terms of presence or absence of obstructive coronary artery disease. No significant differences were detected among the groups. The smoking variable was treated as a category and evaluated globally through use of the chi-square test, and a p value of 0.0373 was found.

The intragroup subanalysis showed significant difference only among the groups not having periodontal disease or coronary artery disease versus the groups having periodontal disease and coronary artery disease (p = 0.0079, two-tailed Fisher's exact test) and between the groups having periodontal and coronary artery disease versus those being edentulous and having coronary artery disease (p = 0.0067; two-tailed Fisher's exact test); the association of smoking with the presence of periodontal disease was always indicated. It should be emphasized that, although an association exists between periodontal disease and smoking, there was no association between the presence of obstructive coronary artery disease and smoking (p = 0.2381; two-tailed Fisher's exact test),

In sum, in a sample of selected patients with acute coronary artery disease, in whom the presence of obstructive coronary disease was detected by cardiac catheterization, the conventional risk factors were not sufficient to separate the groups with and without obstruction. The same did not occur with the presence of active periodontal disease, indicating that this condition may be considered an isolated risk factor for syndromes. Consequently, we agree with Martin's suggestion regarding inclusion of periodontal examination when investigating the presence of coronary artery disease. Once again we thank him for his comments, which have allowed us to complement the results published.

#### Renata Accarini

#### **Moacir Fernandes de Godoy**

Hospital de Base da Fundação Faculdade Regional de Medicina (FUNFARME)

Faculdade de Medicina de São José do Rio Preto (FAMERP)

Curso de Pós-Graduação em Ciências da Saúde da FAMERP

São José do Rio Preto, SP moacirgodoy@cardiol.br

1. Accarini R, Godoy MF. Periodontal disease as a potential risk factor for acute coronary syndromes. Arq Bras Cardiol. 2006;87:592-6.