Letters to the Editor

Letter regarding “Are cardiovascular risk parameters and glycemic levels associated with periodontitis in type 2 diabetes patients? A clinical study. Indian Heart Journal 2018; 70: 430–432”

We read with profound interest the research brief entitled “Are cardiovascular risk parameters and glycemic levels associated with periodontitis in type 2 diabetic patients? A clinical study” by Dhir and Vivek Kumar. This study is of great clinical and epidemiological relevance to us as most mainland Indians suffer from periodontitis and tobacco habits are prevalent among them. It is well documented that periodontitis is a potential trigger for systemic inflammation. The acute-phase proteins may act as intermediary steps in the pathway from periodontal infection to cardiovascular disease. One of the famous indologists of modern India late Rai Krishna Das who suffered from hypertension and stroke used to compare poor oral hygiene to 32 poisonous snakes in the mouth, detrimental to health, particularly to cardiovascular health, as early as in 1972. There is a good amount of data available in the literature suggesting periodontitis as a possible risk factor for cardiovascular diseases. In the aforementioned article, vascular risk associated with periodontitis has been well brought out, but two points need to be discussed.

First issue is that of the vascular and periodontitis risk associated with tobacco needs clarity on the type of tobacco usage: smoking, smokeless tobacco, or both. It seems that authors have considered smoking alone in this article, not including the history of tobacco usage. This is an omission that deprives us of any possible role of tobacco as a risk for periodontitis and/or diabetes.

Second, and more importantly, is the mismatch between units and values dealing with metabolic parameters. Units of sugar and lipids are purported to be in mmol/L, but values given seem to be in mg/dl. This needs to be corrected lest the reader goes with alarmingly high values of cholesterol and triglycerides in these cases, which in our opinion may not be the case.

This article reiterates that because smoking and oral tobacco usage are controllable environmental risk factors for various systemic conditions; their detailed mention cannot be overemphasized in case of history recording for every cardiovascular/diabetes case. Also, a thorough examination of the teeth and supporting structures while dealing with the aforementioned cases is imperative.

Conflict of interest

None.

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None.

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Authors’ Response

To the Editor,

We thank Drs N Sharma and S Dwivedi for their interest in our article. It is really heartening for us. We also thank them for their valid observations. There was indeed a typographical error in the measurement units mentioned. The error is being rectified. Thank you for pointing this out.

Regarding the type of tobacco consumption, in our study, we had collected information about smoking only. We agree that information about other forms of tobacco consumption would have provided us additional insights into the relationship between tobacco usage, periodontitis, and cardiovascular risk. However, at the same time, we would like to emphasize that among different forms of tobacco consumption, smoking has the strongest association with the link between periodontitis and cardiovascular disease. Previous studies have shown that periodontitis in combination with smoking increases systemic inflammatory burden and associated cardiovascular risk. Smoking has a detrimental effect on the incidence and progression of cardiovascular disease.
To the Editor:

I have read with great interest the article published by Kathirvel et al. “Tenecteplase versus streptokinase thrombolytic therapy in patients with mitral prosthetic valve thrombosis.” The authors conducted a study in which they compared two modalities of thrombolytic therapy (TT) (streptokinase vs tenecteplase) in patients with mechanical prosthetic valve thrombosis (PVT) in mitral position.

They reported a favorable outcome with tenecteplase as compared with streptokinase and a complete therapeutic success rate of more than 75% in these patients.

Despite the limitations of the study, mainly because of the low number of patients included, it recognizes TT as the first-choice therapeutic option in PVT in developing countries such as India.

I would like to emphasize the importance of TT as an initial therapeutic option and highlight that this treatment is not just for developing countries; rather, the emerging evidence supports it to be a universal intervention in patients with PVT.

For several years, we have recommended TT as the first therapeutic indication in PVT.

Our meta-analysis provides evidence that suggests a primary role for thrombolysis in patients with PVT, and we have concluded that surgery has not been proved superior to thrombolysis.

In the Ultra-slow PROMETEE trial, the authors reported 90% of therapeutic success rate. The overall complication rate was 6.7% (3.3% nonfatal major, 2.5% minor, and 0.8% death). The authors concluded that the TT was efficient with low mortality rates and low risk of nonfatal complications.

Regarding the therapeutic intervention in PVT, there has been a remarkable change in the latest update of the American Heart Association/American College of Cardiology guidelines for the management of valvular heart diseases. It matches the indication level and emphasizes the need for urgent initial treatment with either slow-infusion low-dose fibrinolytic therapy or emergency surgery in patients with a left-sided mechanical PVT presenting with symptoms of valve obstruction (recommendation class I-B). In addition, this last update adds a group of clinical factors to be considered when taking therapeutic decisions, including the choice of the patient and the institutional capacity.

Conflicts of interest

The authors have no conflicts of interest to disclose.

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Thrombolysis may be a universal therapeutic option in left-sided prosthetic valve thrombosis

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periodontitis. Significant correlation has been reported between tobacco smoking and the severity of periodontal diseases measured by the average pocket depth, the number and percentage of pockets above 4 mm, and the average clinical attachment loss, as well as the overall state of oral hygiene. In contrast, even though tobacco chewing is associated with increased cardiovascular risk, the link is much weaker than that of smoking. The deleterious impact of tobacco chewing on oral periodontal health manifests mainly in the form of poor periodontal health and oral submucous fibrosis (OSMF). OSMF is a premalignant condition of oral cavity. Tobacco is often chewed in the form of kharrha, which is a mixture of areca nut and tobacco. Arecoline, an areca nut extract, disrupts the harmony of the periodontal cells and thus leads to destruction of the periodontium.

Nonetheless, we acknowledge the need for further studies evaluating the relationship between various forms of tobacco consumption, periodontal health, and cardiovascular disease.

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