Exodontia may improve glycemic control of diabetic patients with periodontitis

Darre et al. have conducted a well-designed meta-analysis of interventional studies to determine the efficacy of periodontal therapy on glycaemic control in diabetic patients by gauging its effectiveness in reducing HbA1c levels [1]. The authors of the study noted that one of the nine randomized and controlled clinical trials that they deemed eligible for inclusion in the meta-analysis upon sensitivity analysis significantly deviated from the calculated overall treatment effect and that, without this study, the overall standardized mean difference (SMD) decreased to a non-significant value [2].

I, as one of the co-authors of the study in question would posit that the difference in robustness of results between my study and the eight others arises from Darre et al.’s incomplete description of our research protocol – namely, they failed to recognize that we extracted numerous non-restorable teeth in addition to providing periodontal treatment. Specifically, we removed teeth having either excessive alveolar bone loss secondary to advanced periodontal disease (teeth which were often mobile and likely not be readily debrided by the patient) or periapical infections (teeth with an osteolytic process at their apex arising from dental caries infecting the dental pulp and rendering them non-vital). Both of these two conditions are known to cause significant local and systemic inflammatory reactions that may impair glycaemic control and were, therefore, best managed by extraction.

I would respectfully suggest that Darre et al. re-review the other eight studies and determine the severity of dental disease that was present in their diabetic patient populations and determine whether all the required dental treatment – including the extraction of non-restorable teeth – was, in fact, rendered. In our experience, it is very unusual to have random populations of patients with generalized advanced periodontal disease not needing extraction of some teeth. In the absence of such an analysis, we can only assume that our patients may have had a greater burden of chronic infection/inflammation than those in the eight other studies and that our patients, therefore, required extractions in addition to periodontal therapy, thus resulting in the more profound treatment effect that we demonstrated.

Conflicts of interest

None.

References


Answer from author about “Efficacy of periodontal treatment on glycaemic control in diabetic patients. A meta-analysis of interventional studies”

Dear Editor

We are grateful to Prof. Friedlander for his pertinent comments concerning the systematic review that we published in the November 2008 issue of Diabetes & Metabolism [1]. Prof. Friedlander, co-author of the article entitled ‘The effect of periodontal treatment on glycemic control in patients with type 2 diabetes mellitus’. Our study’s inclusion of non-restorable teeth in addition to periodontal therapy is an important consideration and aligns with the findings presented by Friedlander.

Accepted by: Yves Sixou

1262-3636/$ – see front matter. Elsevier Masson SAS.