



Letter to the Editor, related to the article “No association between periodontitis and preterm low birth weight: a case–control study”, submitted by Mariana Tampa Fogacci et al. to your Journal. Arch Gynecol Obstet (2018) 297:71–76

Tibor Novák¹ · Márta Radnai² · Gábor Németh¹

Received: 14 June 2018 / Accepted: 31 January 2019
© Springer-Verlag GmbH Germany, part of Springer Nature 2019

The article by Fogacci et al. (2018) stated that maternal periodontal disease is not a risk factor associated with preterm low birth weight infants, and periodontal clinical parameters are not associated with adverse pregnancy outcomes.

There are some ambiguous information related to this case–control study:

1. In the introduction chapter, the authors described the controversies between the results of different studies, some of them supporting the basic idea that there is a connection between periodontal diseases and preterm delivery and low birth weight [1–3], while others denied this theory [4]. However, the study focuses on preterm birth and low birth weight (PTLBW) newborns. However basically, we discuss about separate categories of neonates: preterm ones, when the delivery occurs before the completion of 37 gestational weeks and their weight at delivery can be normal for gestational age or, in case of an associated fetal restriction, lower than the normal; on the other hand, the low birth weight newborn, when the birth can occur before or after the completion of 37 weeks, but the newborn weight is under the accepted 10th percentile corresponding to the gestational age at delivery.
2. Based on the study design, all pregnancies corresponding to the enrollment criteria were included in the study, and after delivery two groups were formed: mothers of preterm (<37 weeks) and/or low birth weight new-

borns (cases group), and mothers of full-term delivery (≥ 37 weeks) and newborns weighing ≥ 2500 g (controls). This type of enrollment is the major handicap for the study. A preterm delivery does not mean in the same time that the newborn will also have a low birth weight. Also, in the article there are no available data about the real newborns' weight, whether from term or preterm deliveries.

Taking into considerations these statements, the final conclusions of the study in our opinion are based on weak funding and needs a major revision [5–7].

Author contributions TN: writing the article. MR: writing, supporting the article. GN: writing, supporting the article.

Compliance with ethical standards

Conflict of interest The authors declare no conflict of interests related to this article.

References

1. Radnai M, Pál A, Novák T, Urbán E, Eller J, Gorzó I (2009) Benefits of periodontal therapy when preterm birth threatens. *J Dent Res* 88:280–284
2. Novák T, Radnai M, Gorzó I, Urbán E, Orvos H, Eller J, Pál A (2009) Prevention of preterm delivery with periodontal treatment. *Fetal Diagn Ther* 25:230–233
3. López NJ, Smith PC, Gutierrez J (2002) Periodontal therapy may reduce the risk of preterm low birthweight in women with periodontal disease: a randomized controlled trial. *J Clin Periodontol* 73:911–924
4. Fogacci MF, Leão A, Vettore MV et al (2010) Periodontal treatment completed before the 35th week of pregnancy appeared to

✉ Tibor Novák
novak.tibor@med.u-szeged.hu

¹ Department of Obstetrics and Gynecology, University of Szeged, Semmelweis u. 1, Szeged 6725, Hungary

² Faculty of Dentistry, University of Szeged, Tisza Lajos krt. 64-66, Szeged 6725, Hungary

- have a beneficial effect on birthweight and time of delivery. Letter to the editor and the authors' reply. *J Dent Res* 89:101–102
5. Fazekas Á (2016) Dental and dental surgical treatment. In: Papp Z (ed) *Handbook of pregnancy care. (Fogorvosi és szájsebészeti ellátás. In: Papp Z. (szerk.) A várandósgondozás kézikönyve.)*. Medicina Könyvkiadó, Budapest, pp 589–593 (**Hungarian**)
 6. Radnai M, Gorzó I, Nagy E et al (2004) A possible association between preterm birth and early periodontitis. *J Clin Periodontol* 31:736–741
 7. Offenbacher S, Katz V, Fertik G et al (1996) Periodontal infection as a possible risk factor for preterm low birth weight. *J Periodontol* 67(Suppl):1103–1113

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.