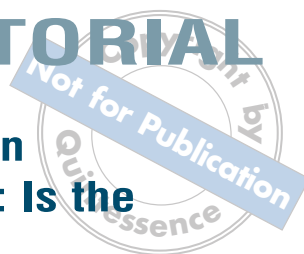




The effect of periodontal therapy on preterm birth and low birth weight: Is the jury still out?



Periodontal disease's influence on maternal health can lead to increased rates of premature birth and low birth weight. The degree of this effect has been vehemently contested by medical and dental researchers. Moreover, in the past decade or so, research related to this field was focused on the effect of interventions to see if there was significant reduction of both the premature births and low birth weight. The interventions used were scaling and root planing and oral health instructions such as toothbrushing, flossing, and using mouthwash. There were conflicting reports from different research groups. Some groups showed a significant reduction in the occurrence of premature births, while others showed minimal or no significant reduction in the incidence of premature births in the population studied. More studies are still forthcoming on interventional strategies.

Data from recent meta-analyses¹⁻³ showed that the effects were not significant. Some of the drawbacks of a significant number of studies included nonhomogeneity in the criteria used by the researchers in the diagnosis of periodontal disease, the variation in methodology, the sample size of the patients, and the level of pre-existing risk among the population studied. Future well-designed studies could more clearly answer this question.

The major factor in the complexity to separate periodontal disease as an independent risk factor is the existence of other confounders that might have had an adverse influence on maternal health and are difficult separate from the risk factor in question. This raises the valid question of whether the jury is still out on this topic. More recently, Jeffcoat et al⁴ showed that successful periodontal therapy reduced the risk of preterm birth in a group of high-risk individuals. This was a well-conducted study, yet had its limitations. The authors agreed that the results of this study

could not be easily extrapolated to other population groups. It is now known that the majority of the recent increased preterm births in the United States is iatrogenic (in this case, an increased rate of induction of labor or Cesarean birth). It is essential to unearth each and every risk factor associated with the occurrence of preterm birth and infant low birth weight and to discover ways and means to reduce their incidence. Increased premature birth and its associated economic and health burdens are difficult to ignore. Periodontal disease has not yet been proven as an independent risk factor, nor have interventions for the reduction of both preterm birth and low birth weight.

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