

Pregnancy and periodontal disease

Because a number of studies have indicated an association between periodontal disease in mothers and deliveries of preterm, low-birthweight infants, Delta Dental recommends that pregnant women pay special attention to their oral health during pregnancy.

The physical and economic costs of preterm infants are great. Preterm infants are at an increased risk for a number of serious health complications, including chronic lung disease, severe brain injury, motor and sensory impairment, learning difficulties and behavioral problems. First-year mortality rates are significantly higher for preterm infants. Plus, these children often require significantly greater family practitioner services, education services and social services than infants born at term or normal birthweight.¹ The economic impact associated with the perinatal period, as well as throughout life, can be substantial.² The annual societal financial burden associated with preterm birth in the United States is more than \$26 billion. Individually, on average, a preterm infant costs \$51,600 more than the average cost for full-term infants in the first year of life.³ Additional long-term costs often continue over the individual's lifetime.

Several studies have examined the association between periodontal disease and deliveries of preterm, low-birthweight infants. While results vary, some of these studies show a correlation. Various studies indicate that pregnant women who have periodontal disease range from 3.5 to 7 times more likely to deliver preterm, low-birthweight infants.⁴

Some studies also indicate the treatment for periodontal disease may reduce the incidence of preterm, low-birthweight infants. An American study showed a 28 percent reduction for low-income, African-American and Hispanic women when periodontal disease was treated⁵, while a Chilean study of low-income women found an 82 percent reduction.⁶

Although further studies are continuing to explore the link between periodontal disease and preterm, low-birthweight infants as well as the outcome of periodontal treatment during pregnancy, the potential health ramifications, quality of life and economic impact of the condition warrant taking precautions to reduce its incidence.

EBICP benefits for women who are pregnant

With an indicator of pregnancy, a participant is eligible for one additional dental visit for adult prophylaxis or periodontal maintenance during the pregnancy. Coverage will be at the group-contracted benefit level, with the additional frequency allowance being the only change. There is no age requirement and the patient may be the subscriber, spouse or other covered dependent.

¹ Stavros P, Ziyah M et al. The impact of preterm birth on hospital inpatient admissions and costs during the first 5 years of life. *Pediatrics*. 2003;112:1290-1297.

² Organization for Economic Co-operation and Development (OECD) OECD Health Data 99: A Comparative Analysis of 29 Countries. Paris, France: OECD;2001.

³ Behrman, R, Stith-Butler, A. Preterm Birth: Causes, Consequences, and Prevention. Washington, D.C., The National Academies Press, 2006; 329.

⁴ Xiong X, Buekens P, Fraser WD, Beck J, Offenbacher S. Periodontal disease and adverse pregnancy outcomes; a systematic review. *BJOG* 2006; 113:135-143.

⁵ Mitchell-Lewis D, Engebretson SP et al. Periodontal infections and preterm birth; early findings from a cohort of young minority women in New York. *Eur J Oral Sci* 2001;109:34-9.

⁶ Lopez NJ, Smith PC, Gutierrez J. Periodontal therapy may reduce the risk of preterm low birthweight in women with periodontal disease: a randomized controlled trial. *J Periodontology* 2002;73:911-24.

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