## The

## PREGNANCY

CONNECTIO By Lisa Marie Samaha, DDS, FAGD

Prematurity is defined as a birth before 37 weeks of pregnancy. Low birth weight babies weigh less than 5 lbs, 8 oz. These phenomena are connected and in total, affect about 18% of all births.

Premature birth and low birth weight can occur separately but about 60% of low birth weight babies are pre-term. Together they are the leading cause of newborn death in the first month of life. Those that do survive often face chronic health problems and developmental disabilities. Recent research reveals abnormal brain patterns occur even through adolescence.

What is not well known is that periodontal



disease may be a greater factor for pre-term/low birth weight than smoking or alcohol use. Throughout pregnancy, regulatory proteins called cytokines and prostaglandins steadily increase until a critical threshold is reached inducing labor, cervical dilation and delivery. The specific bacteria associated with periodontal disease are capable of stimulating excessive production of the regulators which induce pre-term birth.

Specifically, in 1996, Dr. Steve Offenbacher, of UNC Chapel Hill, found that sever periodontitis was associated with a 7.5 to 7.9 times increase in the rate of low birth weight babies. This has been substantiated by other investigators. Since then, intervention studies have been completed in which periodontal treatment reduced the incidence of pre-term birth and low birth weight infants between 71 percent and 84 percent in pregnant women with moderate to severe chronic periodontitis. Dr. Offenbacher stated, "45,000 premature births per year could be prevented if periodontal disease could be eliminated in expectant mothers."

Because of hormone levels, pregnant women are for more disposed to gingivitis than the population and it is estimated that 50% of pregnant women have gum disease to some extent. Dr. Nestor J. Lopez, Professor of the University of Chile, explained, "We found a significant association between gingivitis and pre-term birth after adjusting for the major risk factors for pre-term delivery, suggesting that gingivitis, the earliest form of periodontal disease, is an independent risk factor for preterm birth and low birth

weight...Periodontal therapy reduced pre-term birth and low birth weight infant rates by 68 percent in women with pregnancy-associated gingivitis."

"Pregnancy-associated gingivitis is a preventable and easy to treat disease," relates Kenneth A Krebs, DMD and American Academy of Periodontics president. "Although it is still not known what are the precise mechanisms involved in the association between periodontal infections and pre-term birth, to date, no harmful damaging effect caused by periodontal intervention in pregnant women has been reported". Therefore, conscientious periodontal care of expectant mothers is important. Extraordinarily high health care costs are generated by pre-term birth, and any strategy that reduces the pre-term birth rate is likely to produce both health and economic benefits for mothers and infants. "The real cost saving is best represented by the lives of children saved from premature death and biological and social impairment", said Dr. Lopez.



Aware of the significance of the research with regards to periodontal disease and pregnancy complication, Cigna Health Care has begun their Oral Health Maternity Program. Through this program, medical insurance pays for the periodontal care of their pregnant insured. Cigna Dental is also cooperating, "...we are launching our new Cigna Dental Oral Health Maternity Program, which enhances benefits for

pregnant members with Cigna medical and fully insured dental coverage".

"We hope this will encourage pregnant members to have an oral health exam and to seek needed treatment for gum disease. Effective 1/106 Cigna Dental will cover periodontal scaling and root planing preformed during pregnancy at 100% for eligible members. In addition, for members not requiring scaling an root planing, we will cover an additional cleaning during pregnancy because we recognize the potential risk of "pregnancy gingivitis." We will also cover treatment for inflamed gums around wisdom teeth at 100% during pregnancy."

"Ideally, women should begin their pregnancy without periodontal infections, and they should be educated and motivated to maintain a high level of oral hygiene prior to and throughout pregnancy," encouraged Lopez. "If periodontal infection is diagnosed at any time during pregnancy, the treatment should be administered as soon as possible in order to reduce the risk of pre-term birth and low birth weight."

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