

## **Periodontitis related to preterm birth**

Periodontitis refers to the group of conditions that affect the hard and soft tissues that support the teeth. Periodontitis may be noted at any age and is a significant cause of loss of teeth. Additionally, periodontitis has also been linked to a number of general conditions such as heart disorders. One of the special concerns of periodontitis is its association with preterm birth in pregnant women. A number of physiological and hormonal changes are noted during pregnancy. Inflammation of the gingival and aggravation of periodontal conditions is a common factor noted during pregnancy that has been attributed to the alteration in the hormonal levels in a pregnant woman.

While bleeding from the gums, pain and bad breath are few of the concerns of periodontitis during pregnancy, the risk of preterm birth is one of the major concerns. Improper oral hygiene generally accentuates the underlying gum disorders during pregnancy. Two mechanisms have been proposed for the increased incidence of preterm birth in pregnant women suffering from periodontitis. Spread of bacterial infection to the womb has been attributed to be one of the mechanisms of preterm birth. This spread may occur through the blood wherein the bacteria from the gums may travel down to the womb. Influence of the bacteria on the womb either through directly influence or through the production of certain by-products may induce premature delivery. According to the other mechanism, certain specific substances produced by the bacteria present in the gums can enter the blood stream and may induce premature delivery due to its chemical properties. Although the exact mechanism that results in premature birth has not been identified, the fact that periodontal disease causes premature delivery is well proven.<sup>1,2</sup>

Further, several studies have demonstrated the reduction in the risk of premature delivery in pregnant women following appropriate dental treatment. The reduction of premature delivery was quite significant in women who underwent periodontal treatment during pregnancy. Another study reported that periodontal therapy provided during the third trimester of pregnancy was associated with lower incidence of preterm low-birth weight babies in women suffering from periodontitis.<sup>3</sup>

Thereby it can be concluded that periodontitis does increase the risk of premature delivery or preterm low-birth weight babies.

It has been recommended that women planning to get pregnant or those who have become pregnant should obtain a dental consultation to rule out the presence of any dental condition that may get aggravated during pregnancy. While any treatment during the first trimester has been contraindicated, dental treatment can be safely provided during the second and third trimesters. Better dental care during pregnancy can help the woman to enjoy an uncomplicated pregnancy and deliver a healthy weighing baby. Brushing twice daily with periodic visit to a dentist or periodontist can be beneficial in reducing the risk of preterm birth. <sup>1-3</sup>

### **References:**

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