THE oral cavity is the mirror of the body reflecting the health status of a person. Oral health in a woman is more affected due to various hormonal changes she undergoes throughout her life during puberty, pregnancy and menopause making her more vulnerable to oral diseases.

Especially during pregnancy hormonal changes are unique and manifold increase of hormones occurs in the maternal blood. Estrogen, progesterone, human somatomammotropin (hCS) and human chorionic gonadotropin (hCG) are major pregnancy hormones.

Local irritants like plaque, calculus or tartar present in oral cavity around the teeth are responsible for various diseases of gums. During pregnancy there are alterations in the hormones which lead to an exaggerated response of gums to these local irritants. These changes bring about redness of gums (erythema), bleeding gums, gum enlargement, and rarely, pregnancy tumor. Ultimately loosening of teeth occurs if the condition is not treated.

Recent studies have also shown that poor oral hygiene before or during pregnancy may lead to diseases like periodontitis and gingivitis, which in turn are said to lead to Pre-Term Low Birth Weight Babies (infants weighing less than 2.5 kg at birth).

The periodontium is the attachment apparatus of the teeth and consists of cementum, periodontal ligament, the alveolar bone and part of the gingiva. Normal periodontium provides the support necessary to maintain teeth in function. Gingiva (gum) is the part of the oral mucosa that covers the alveolar processes (bone) of the jaws and surrounds the necks of the teeth. Cementum is a calcified, tissue that forms the outer covering of the anatomic root. It is about 55% calcium salts with water and collagen comprising the organic portion. By means of its fibrous attachment to the periodontal ligament, the cementum holds the tooth to the periodontal ligament on inside while with the alveolar bone, on the outer side.

Periodontal (gum) diseases include both gingivitis (inflammation of gingiva) and periodontitis (earlier known as pyorrhea). Periodontitis is an inflammatory disease of the supporting tissues of the teeth resulting in progressive destruction of the periodontal ligament and alveolar bone.

Gingivitis is known to be prevalent among pregnant women. Pregnancy affects the severity of previously inflamed areas (including unnoticed inflamed areas), but does not alter healthy gingiva. There could be bleeding in the gums.

Loose teeth may mean active periodontal infection accelerated by pregnancy. Sometimes inflamed gingiva...
enlarges and forms discrete tumor-like masses, referred to as pregnancy tumor (pyogenic granuloma or pregnancy epulis) in about 0.25 to 9.6% of pregnant women, most often in 2nd or 3rd month of pregnancy and may bleed easily. Such lesion usually occurs in areas of gingivitis and is associated with poor oral hygiene and calculus (tartar).

Periodontitis also has been linked to premature gestational period (less than 36 weeks) and consequently low birth weight babies (birth weight less than 2500 g). Studies have found that expectant mothers with periodontal disease are up to seven times more likely to deliver premature, low birth weight babies. Maternal periodontal disease is also associated with an increased risk of preeclampsia (high blood pressure and excess urine protein).

Other oral problems of pregnancy include perimolysis (acid erosion of teeth) due to morning sickness, xerostomia (dryness of mouth), and siaorrhea or ptyalism (excessive secretion of saliva).

**Periodontal Treatment**

Prevention is better than cure. Therefore, pregnant women need to maintain meticulous oral hygiene throughout the pregnancy. Scaling root planing (cleaning of teeth) may be performed whenever necessary during pregnancy. Avoid dental treatment during the 1st (owing to fetal organogenesis) and 3rd trimester (owing to premature delivery due to sensitive uterus) of pregnancy.

Early 2nd trimester is the safest period for providing routine dental care. Pregnancy tumor that interferes with mastication or is painful or continues to bleed may require removal and biopsy before delivery. In women who received periodontal therapy that included plaque control, scaling root planing and non-alcohol based oral rinse once daily, significant reduction in the incidence of preterm low birth weight baby was found.

However, it is most desirable to avoid any irradiation during pregnancy, especially during first trimester, because the developing fetus is particularly susceptible to radiation damage. Further, ideally no drug should be administrated during pregnancy especially during 1st trimester, and only selective usage of drugs safe in pregnancy should be encouraged, but after consultation with the gynecologist.

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**Enjoy Happy Smile with Healthy Teeth**

**Emphasis should be given on meticulous home care measures like brushing twice daily and flossing/interdental cleaning and periodic dental checkups by professionals.**

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**Social Responsibilities**

The area of concern in the Indian sub-continent is that certain taboos and social customs prevent pregnant women from maintaining their oral hygiene. In some households they are restrained from brushing during pregnancy even up to 40 days after delivery. In some families improper oral hygiene habits since childhood and busy schedules of working females may sometimes lead to negligence of oral hygiene measures.

During the first trimester nausea may be an important factor preventing women from performing oral hygiene measures. Gynecologists also don’t stress on maintenance of oral hygiene during pregnancy.

Prevention is the most important aspect of periodontal treatment. It is well documented that “pregnancy itself does not cause gingivitis”. Gingivitis in pregnancy is caused by bacterial plaque, just as it is in non-pregnant individuals. However, pregnancy accentuates the gingival response to plaque. A pregnant woman, therefore, with mild gingivitis (swelling and bleeding gums) should be recommended a careful prevention program during pregnancy.

Scaling, polishing and root planing may be performed whenever necessary throughout the pregnancy. However, second trimester is the safest period for providing the routine dental treatment. Emphasis should be given on meticulous home care measures like brushing twice daily and flossing/interdental cleaning and periodic dental checkups by professionals instead of ceasing tooth brushing and other oral hygiene measures to avoid bleeding from gums.

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Dr. Vivek K. Bains is Associate Professor in Department of Periodontology, Saraswati Dental College & Hospital, 233, Tiwari Ganj, Post office-Chinhat (Via-Juggour), Lucknow (UP)-227105; Email: doc_vivek76@yahoo.co.in.

Dr. Rhythm Bains is Assistant Professor in Department of Conservative Dentistry & Endodontics, Faculty of Dental Sciences, King Georg’s Medical University, Lucknow (UP)-226003.

Dr. Vipin Bharti is Principal and Professor and Head, Department of Periodontology, Government Dental College & Hospital, Patiala (PB)-147001.