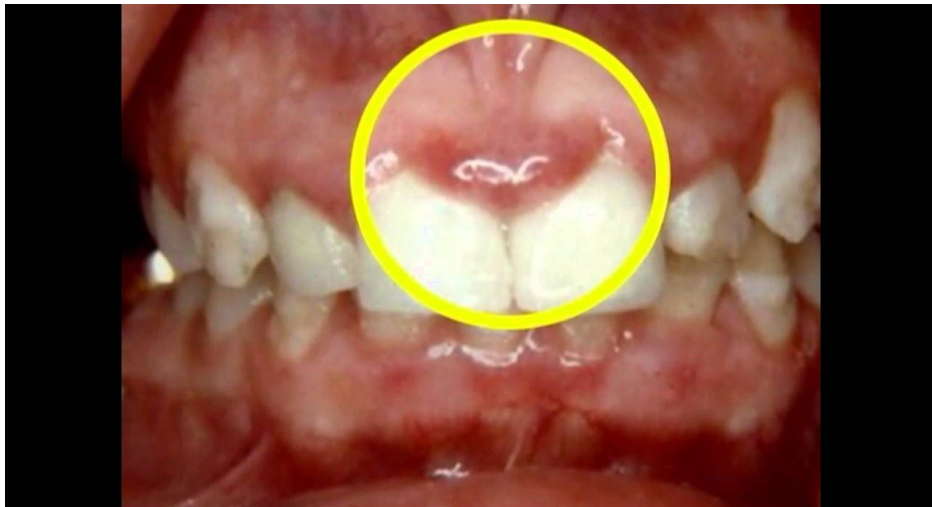


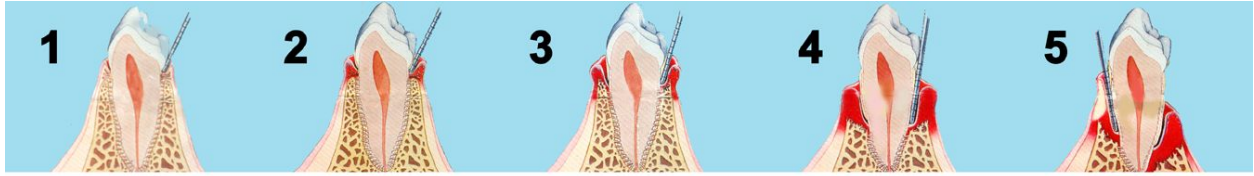
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Periodontitis & Pregnancy

What is Periodontitis?

- Periodontitis is the advanced form of the gum disease, gingivitis
- It is caused by an inflammation from plaque that accumulates between the teeth and on the gums.
- As periodontitis progresses, toxins are released from bacteria that destroys the tooth and the supporting structures.
- Gingivitis is reversible. Periodontitis causes irreversible permanent damage and destruction of the periodontium: cementum, [PDL] periodontal ligament and alveolar bone.





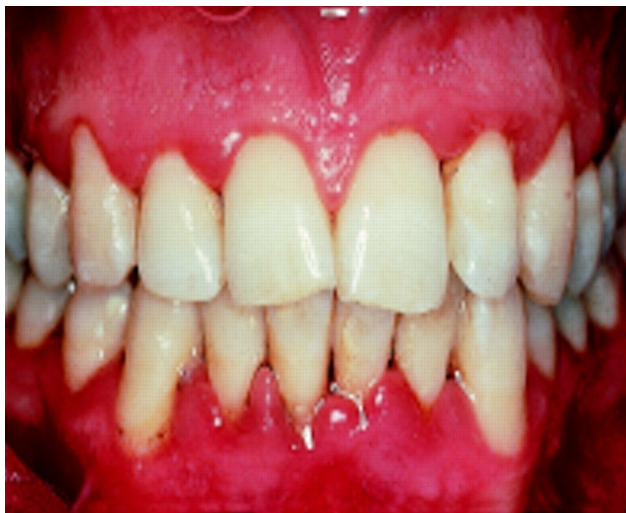
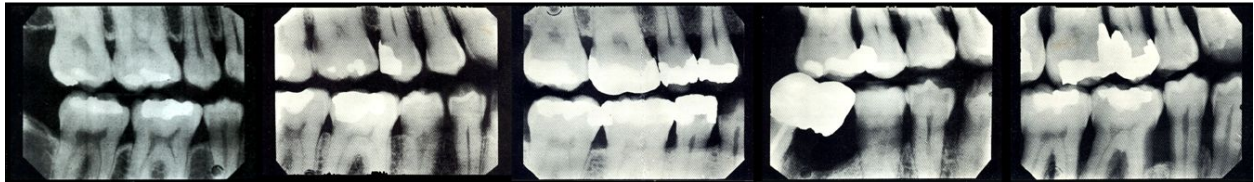
Healthy Teeth & Gums

Gingivitis

Early Periodontitis

Moderate Periodontitis

Advanced Periodontitis



Risk Factors:

Common risk factors for periodontitis include:

- Stress
- Poor diet (i.e. High sugar intake)
- Smoking & tobacco use
- Obesity
- Age
- Certain medications
- Poor dental hygiene
- Defective dental restorations
- Orthodontic appliances
- Genetic factors
- Diabetes, Cancer, AIDS
- Hormonal changes, (fluctuating estrogen levels)
 - Puberty
 - Menopause
 - **Pregnancy**

Pregnancy and Periodontitis

During pregnancy, changes in hormone levels promote an inflammatory response that increases the risk of developing gingivitis and periodontitis. As a result of varying hormone levels without any changes in the plaque levels.

- Majority of pregnant women develop gingivitis commonly referred to as pregnancy gingivitis. Periodontitis developed as a result of untreated gingivitis.
- Periodontal disease is typically seen between the second and eighth month of pregnancy.

- Studies have confirmed a correlation between periodontal disease and adverse pregnancy outcomes such as:
 - i.** pre-eclampsia,
 - ii.** preterm birth,
 - iii** low birth weight
 - iv.** (PROM) Premature rupture of membranes.
- According to the CDC, babies as a result are at a higher risk for long-term health problems such as delayed motor skills, social growth, learning disabilities, respiratory problems, vision and hearing loss, or feeding and digestive problems.
- Many women neglect their oral health by rationalizing, there is insufficient time, or TX could harm their baby, or
- Fear or dissatisfaction with dental services
- Increased oestrogen and progesterone during pregnancy leads to exaggerated gingival tissue response to dental plaque.
- Pregnancy gingivitis is extremely common affects 30%-86% of all pregnant women; if not reversed will lead to periodontitis

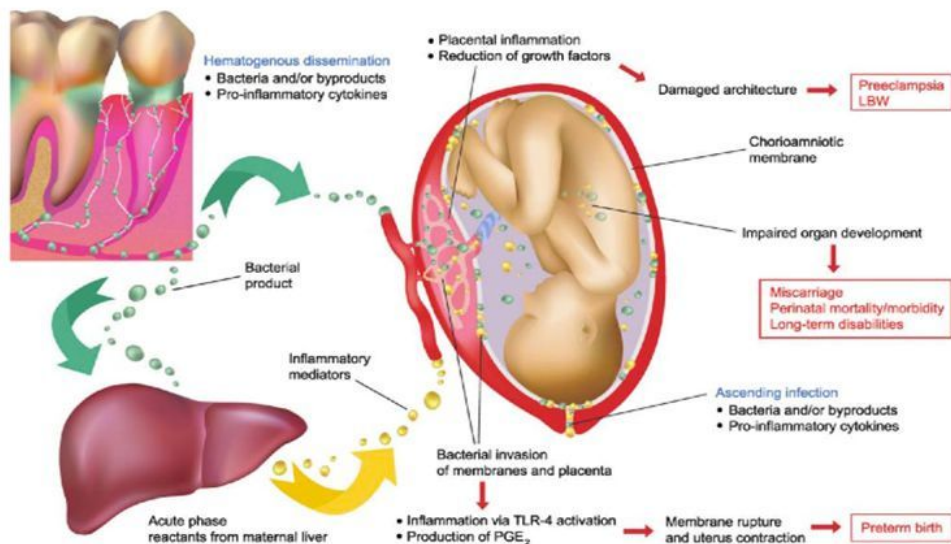


Fig. 2. Possible biological mechanisms/pathways associating periodontal disease and pregnancy complications.

Offenbacher (1996), Jeffcoat (2001), Jarjoura (2005) : Proposed that periodontal disease is a risk factor for PLBW.

Scaling and Root Planing in pregnant females reduced the incidence of preterm birth (Jeffcoat 2001)

Prevention

- Education
- Diligent homecare before/during pregnancy
- Healthcare workers including Dental Hygienist must increase awareness of oral health and disseminate information about oral care before/during pregnancy.
- Adequate training of healthcare professional, to identify oral health disease especially dental plaque as a factor associated with periodontal disease.

The dental and medical health professionals agree that maintaining periodontal health is a crucial part of a healthy pregnancy. Non-surgical periodontal therapy is safe for pregnant women and can result in improved periodontal health. Therefore, it is vital that pregnant women be educated and encouraged to preserve their oral health and should be recommended to attend regular dental cleanings during pregnancy.

Treatment

Non-surgical

- [Brushing and Flossing](#) .
- [Scaling and deep cleaning](#)
- Medication-if the bacterial infection are severe, may get antibiotics to help to combat the infection.

Surgical

- [Flap surgery](#)
- Bone and tissue grafts

Treatment outcome

- Periodontal treatment was safe as it improves periodontal health and prevents periodontal disease progression.
 - Periodontal treatment does not interfere during pregnancy and postpartum, and does not harm the foetus.
 - Within the strictly plaque control, gingival health can be recovered impregnability of hormonal change within pregnancy.
-
- Routine brushing and flossing, and seeing a periodontist, dentist, or dental hygienist for a thorough periodontal evaluation during pregnancy may decrease the chance of adverse pregnancy complications. It is important for expectant mothers to monitor their periodontal health and to have a conversation with their periodontist or dentist about the most appropriate care. By maintaining your periodontal health, you are not only supporting your overall health, but also helping to ensure a safe pregnancy and a healthy baby.

Role of hygienist

- Educate patients, bringing awareness about the risk of periodontal diseases especially during pregnancy,
- Recognition of early manifestation of the disease.
- Treatment intervention:
 - i. Scaling and root planing
 - ii. Regular dental check-up before and during pregnancy
 - iii. Most importantly is maintaining of good oral hygiene habits, ie. brushing at least 2x day, and flossing at least once per day, with the aid of an antibacterial mouth rinse.

References:

Gesase, N., Miranda-Rius, J., Brunet-Llobet, L., Lahor-Soler, E., Mahande, M. J., & Masenga, G. (2018, September). The association between periodontal disease and adverse pregnancy outcomes in Northern Tanzania: a cross-sectional study. *African Health Sciences*, 18(3): 601-611. doi: 10.4314/ahs.v18i3.18.

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Lack of dental visits during pregnancy may be attributed to lack of oral health care information and counseling in the antenatal health care centers.

Oral health education should be included as an integral part of antenatal care.

Goal: create awareness among the expectant mothers about the importance of prevention of dental disease. The increased awareness would also improve the mothers' dental care-seeking behavior.