Pregnancy

Dentalelle Tutoring

First Trimester

- During a patient's first trimester, initiate a preventive care program consisting of plaque control and oral hygiene instruction.
- Simple scaling and prophylaxis may be accomplished, but no elective treatment should be started. **Only emergency dental needs should be considered during this trimester.** The baby's organs develop during this time and are most sensitive to radiation and chemicals.
- Proper radiograph technique using a lead abdominal shield and the lowest dose possible (fast film or digital) produce a fetal exposure that is extremely low **BUT if x-rays are not needed do not take them.**

Second Trimester

- The **second trimester** through the **first half of the third trimester is the safest time to provide dental treatment.** Periodontal maintenance and preventive care and simple restorative procedures that will eliminate potential problems and control active disease may be performed. Complex and elective dental care is best deferred until after the baby is born.

Third Trimester

- In the third trimester, scaling and prophylaxis may be repeated to minimize hormonal gingival changes.
- Supine position may cause the fetus to occlude the blood supply from returning to the heart, leading to a loss of consciousness.

- **Elevation of the right hip of the mother in the dental chair will allow the inferior vena cava to stay patent and avoid this pooling of the blood in the legs.** If she does start to feel faint, the patient should position herself on her side.
- Emergency dental treatment should be provided, as the mother's severe pain, infection, or both can cause problems for the baby.

Medications

- **Lidocaine with epinephrine is safe**, but as with any patient, proper aspiration to avoid intravascular injection is necessary for effective anesthesia and to avoid the cardiovascular side effects of epinephrine. Too rapid a heartbeat and systemic vasoconstriction can lead to fetal hypoxia.
- **Penicillin, clindamycin, and cephalosporins are safe antibiotics** and should be prescribed when indicated. Tetracyclines of any type should be avoided during pregnancy and breastfeeding to avoid any discoloration of the teeth.
- Analgesia presents a more difficult decision, but **acetaminophen is OK for most patients. Aspirin and other nonsteroidal, anti-inflammatory drugs (e.g., ibuprofen) should not be prescribed.**
- **For severe pain, oxycodone is considered safe.** Codeine, hydrocodone, or propoxyphene are probably safe for a short time. **Nitrous oxide is controversial but probably safe as long as there is oxygen administered as well.**

A, B, C, D, X classification.

- **A** **No risk in controlled human studies:** Adequate and well-controlled human studies have failed to demonstrate a risk to the fetus in the first trimester of pregnancy (and there is no evidence of risk in later trimesters).
- **B** **No risk in other studies:** Animal reproduction studies have failed to demonstrate a risk to the fetus and there are no adequate and well-controlled studies in pregnant women OR Animal studies have shown an adverse effect, but adequate and well-controlled studies in pregnant women have failed to demonstrate a risk to the fetus in any trimester.
- **C** **Risk not ruled out:** Animal reproduction studies have shown an adverse effect on the fetus and there are no adequate and well-controlled studies in humans, but potential benefits may warrant use of the drug in pregnant women despite potential risks.
- **D** **Positive evidence of risk:** There is positive evidence of human fetal risk based on adverse reaction data from investigational or marketing experience or studies in humans, but potential benefits may warrant use of the drug in pregnant women despite potential risks.
- **X** **Contraindicated in Pregnancy:** Studies in animals or humans have demonstrated fetal abnormalities and/or there is positive evidence of human fetal risk based on adverse reaction data from investigational or marketing experience, and the risks involved in use of the drug in pregnant women clearly outweigh potential benefits.

Pregnancy Gingivitis

- Pregnancy gingivitis is the most common dental concern during pregnancy, **affecting almost 50% of all pregnant women.** Pregnancy gingivitis causes your gums to become red, puffy, and inflamed. It can also trigger bleeding gums when you are brushing and flossing.
- Pregnancy gingivitis is caused by bacteria that form between your teeth and gums. When you eat, tiny particles of food get stuck between your gums and teeth. These particles soon attract bacteria, resulting in inflamed gums. Anyone can be affected by gingivitis but pregnant women are at greater risk. This is because amplified levels of progesterone and estrogen lead to increased blood flow throughout the body, especially to the gums.
- **What is Pregnancy Gingivitis?**
  Pregnancy gingivitis is simply gingivitis that occurs during pregnancy. More than 50% of all pregnant women experience some form of pregnancy gingivitis. Though gingivitis disease is annoying, it is usually harmless, unless it is left untreated. If pregnancy gingivitis progresses to periodontal disease, it can increase your risk of going into preterm labor.

Symptoms

- There are a few symptoms of gum disease to keep an eye out for. If you notice any of these symptoms, it is important to seek treatment as soon as possible.
- tender, swollen gums
- **red or purple-red gums**
- gums that look shiny
- **bleeding gums after brushing or flossing**
- persistent bad breath
- a bad taste in the mouth that won't go away
- mouth sores

Treatment and Prevention

- There are no cures for gum disease although its damage can sometimes be reversed or halted. **All pregnant women should receive at least two thorough dental cleanings during pregnancy. This should help to reduce your chances of developing pregnancy gingivitis or periodontal disease.**
- If you already have gingivitis, the best gum disease treatment is to have a complete cleaning at your dentist's office. Your dentist will scale your teeth using a variety of instruments. This will remove excess plaque from your teeth and around your gum line. Serious gingivitis may also require root planning, a process during which the roots of your teeth are cleaned of plaque completely.

- Maintaining a good oral hygiene routine will ensure that you have healthy gums and teeth for a long time to come. Try following these tips:
- **brush twice a day** for at least five minutes
- **use a soft bristle brush**
- **floss once a day**
- **avoid eating large amounts of refined sugar** – this will cut down on plaque and tartar buildup
- visit your dental hygienist on a regular basis

What to tell your pregnant patients →

- Now that you are pregnant, you may have noticed that your gums are bothering you more than usual. If your gums are sore or tender, or if they bleed when you are brushing or flossing, you may have a condition called pregnancy gingivitis. **Pregnancy gingivitis is a very common occurrence during pregnancy however; if it is not treated it can lead to complications with your pregnancy.** If you notice any of the symptoms of pregnancy gingivitis it is important that you visit with your dentist in order to get appropriate treatment.

- **What is Gingivitis?**
  Gingivitis is more commonly referred to as gum disease, and it will affect over 90% of Americans at some point in their lives. Caused by the sticky plaque that accumulates on our teeth and gums, it can leave your gums swollen and tender, and even cause them to bleed. Gingivitis can also make brushing and flossing extremely painful. Gingivitis is one of the earliest stages of a more severe type of gum disease, called periodontal disease. Untreated gum diseases will progress into periodontal disease, which can cause irreversible damage to your gums and teeth.

- **There are a number of causes of gum disease in pregnancy.** One such reason is increased blood flow. During pregnancy, your blood flow actually increases by between 30% and 50%. This is to ensure that your baby is provided with the appropriate nutrients to grow and develop. Unfortunately, this increased blood flow can also cause you gums to swell and become very tender. It may even cause your gums to bleed, leaving them at increased risk for gingivitis.

- The rise in your hormones can also play a role in you developing pregnancy gingivitis. These higher levels of hormones leave your gums and teeth more sensitive to the bacteria that hide in plaque. This is one reason why gingivitis is so common in pregnancy.

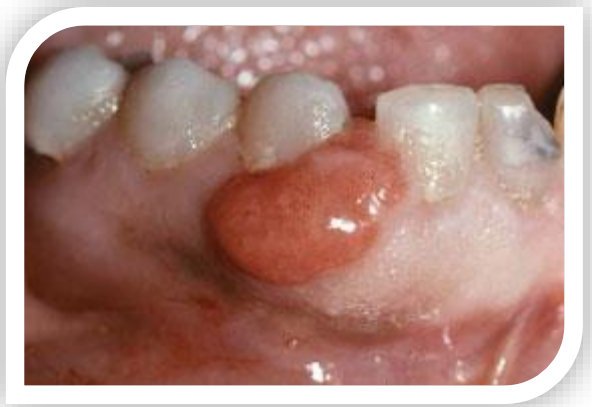
- Morning sickness may also play a small role in contributing to pregnancy gingivitis. Many women find that they can no longer stand the smell or taste of toothpaste, making it difficult to maintain good oral hygiene. Increased vomiting during pregnancy can also take its toll on your gums. Vomit contains stomach acid which can eat away at your gums and teeth, making your mouth very sensitive.

Periodontitis

- If left untreated, gingivitis can progress into periodontal disease. Also known as gum disease, this is a severe gum infection, which destroys the bones and fibers that help to keep your teeth in place.
- Periodontal gum disease can cause some very unpleasant side effects, including bleeding from the gums, tooth loss, and infection. Periodontal disease is of particular concern during pregnancy.
- An increased risk for both preterm labor and having a low birth weight baby is associated with periodontal disease.

Pregnancy Tumors

- Pregnancy tumors can form if you are suffering from pregnancy gingivitis or periodontal disease. Also known as pyogenic granulomas, these tumors are growths that form on your gums. They can sometimes make it hard to speak, eat, and swallow, and may cause pain or discomfort. These tumors can be removed by your dentist if necessary.



Radiography

- Oral radiography is safe for pregnant patients, provided protective measures such high-speed film, a lead apron and a thyroid collar are used. No increase in congenital anomalies or intrauterine growth retardation has been reported for x-ray radiation exposure during pregnancy and a full-mouth series of dental radiographs
- A bitewing and panoramic radiographic study generates about one-third the radiation exposure associated with a full-mouth series with E-speed film and a rectangular collimated beam.
- Patients who are concerned about radiography during pregnancy should be reassured that in all cases requiring such imaging, the dental staff will practise the ALARA (As Low As Reasonably Achievable) principle and that only radiographs necessary for diagnosis will be obtained.

Fluoride

- Fluoride is a category C drug. Fluoride treatment may be needed for patients with severe gastric reflux caused by nausea and vomiting during early pregnancy, which can cause erosion of tooth enamel.
- In these cases, fluoride treatment and restorations to cover the exposed dentin can diminish the sensitivity of and injury to the dentition.
- **Topical fluoride gel may cause nausea, so application of a fluoride varnish may be better tolerated.**

Antibiotics

- Most antibiotics that are commonly prescribed by dentists are category B drugs, with the exception of tetracycline and its derivatives (e.g., doxycycline), which are in category D because of their effects on developing teeth and bone. Ciprofloxacin, a broad-spectrum floroquinolone antibiotic used to treat periodontal disease associated with Actinobacillus actinomycetemcomitans, is in category C.
- **Metronidazole is in category B. Some authors caution against its use in the first trimester because of potential harm to the fetus**;
- Chlorhexidine gluconate is a category B antimicrobial mouth rinse.

Local Anesthetics

- Local anesthetics are relatively safe when administered properly and in the correct amounts. Lidocaine and prilocaine are category B drugs, whereas mepivacaine, articaine and bupivacaine are in category C.
- Epinephrine is also a category C drug. This drug has been studied in amounts of up to 0.1 mg added to local anesthetics used for epidural anesthesia (administered for pain relief during labour); no unusual side effects or complications have been reported in this context.

References

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- Clinical Practice for Dental Hygienists
- Mosbys Dental Drug Reference
- http://www.cda-adc.ca/jcda/vol-75/issue-1/43.pdf