

Oral Health Care Approach during Pregnancy in Albania

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Abstract

Oral health care during pregnancy is often avoided, misunderstood, eventually not properly appreciated by physicians, dentists, and patients as well. In Albania, dental care is almost a private health service excluding elementary school dental service which is covered by public health care. During pregnancy many physiological changes occur where in considerable cases some medical problems may arise such as issues with maternal oral health. The rise in hormone levels during pregnancy causes the gums to swell, bleed, and trap food causing increased irritation to the gums, infections and other problems. The oral health in our country is not supported by any program such as work related dental plan, so it is mostly left on population's perception or in worst case seeking for oral health care takes place when severe oral health consequence has happened.

Evidence-based practice guidelines are still being developed. Research suggests that some prenatal oral conditions may have adverse consequences for the child. Periodontitis is associated with preterm birth and low birth weight, and high levels of cariogenic bacteria in mothers can lead to increased dental caries in the infant. Other oral lesions, such as gingivitis and pregnancy tumors, are benign and require only reassurance and monitoring. Every pregnant woman should be screened for oral risks, counseled on proper oral hygiene, and referred for dental treatment when necessary.

In conclusion, dental care and procedures such as diagnostic radiography, periodontal treatment, restorations, and extractions are safe and are best performed during the second trimester. Adjuvant therapy may be used for high-risk mothers in the early postpartum period to reduce transmission of cariogenic bacteria to their infants. Appropriate dental care and prevention during pregnancy may reduce poor prenatal outcomes and decrease infant caries.

Keywords: Oral health, care, pregnancy, treatment

Introduction

Comprehensive prenatal health care should include an assessment of oral health as well, where in fact this is unfortunately often ignored. According to the latest data, around 25 – 30 % of women in the United States consult a dentist during pregnancy and even when an oral problem occurs, only one half of pregnant women attend dentist visit.² This problem is present in other developed countries as well. In Albania we face a more severe situation when it comes to oral health during pregnancy, there is very limited medical information provided in regards of oral health to preconception, post conception and during pregnancy as well. Lack of data on this issue is another weakness so we can not refer the actual prevalence on our population.

In addition to a lack of practice standards, barriers to dental care during pregnancy include inadequate medical information provided to pregnant women, dental insurance, persistent myths about the effects of pregnancy on dental health, and concerns for fetal safety during dental treatment. Patients, physicians, and dentists are cautious, often avoiding treatment of oral health issues during pregnancy. Nevertheless, pregnancy is a time when women may be more motivated to make healthy changes. Physicians can address maternal oral issues, potentially reducing the risk of preterm birth and childhood caries through oral disease prevention, diagnosis, early management, and dental referral.

Discussion

Common oral problems during pregnancy

Oral lesions

During pregnancy, the oral cavity is exposed more often to gastric acid that can erode dental enamel. Morning sickness is a common cause early in pregnancy; later, a sloppy esophageal sphincter and upward pressure from the gravid uterus can cause or exacerbate acid reflux. Patients with hyperemesis gravidarum can have enamel erosions.⁶

Management strategies aim to reduce oral acid exposure through dietary and lifestyle changes, and by the use of antiemetics, antacids, or both. Rinsing the mouth with a teaspoon of baking soda in a cup of water after vomiting can neutralize acid.³ In addition, pregnant women should be advised to avoid brushing their teeth immediately

after vomiting and to use a toothbrush with soft bristles when they do brush to reduce the risk of enamel damage. Fluoride mouthwash can protect eroded or sensitive teeth.⁷

Dental caries

One fourth of women of reproductive age have dental caries, a disease in which dietary carbohydrate is fermented by oral bacteria into acid that demineralizes enamel.⁸ Pregnant women are at higher risk of tooth decay for several reasons, including increased acidity in the oral cavity, sugary dietary cravings, and limited attention to oral health.⁹ Early caries appears as white, demineralized areas that later break down into brownish cavitations. Fillings or crowns are a sign of previous caries. Untreated dental caries can lead to oral abscess and facial cellulitis. There is evidence that children of mothers who have high caries levels are more likely to get caries.¹⁰ Pregnant patients should decrease their risk of caries by brushing twice daily with a fluoride toothpaste and limiting sugary foods. Patients with untreated caries and associated complications should be referred to a dentist for definitive treatment. Dental caries during pregnancy shown in figure 1.



Figure 1. Dental Caries During Pregnancy

Oral tumor during pregnancy

Pregnancy oral tumor occurs in up to 5 % of pregnancies and is impossible to differentiate from pyogenic granuloma. This vascular lesion is caused by increased progesterone in combination with local irritants and bacteria. Lesions are typically erythematous, smooth, and lobulated; they are located primarily on the gingiva. The tongue, palate, or buccal mucosa may also be involved. Pregnancy tumors are most common after the first trimester, grow rapidly, and typically recede after delivery. Oral tumor during pregnancy, figure 2. Management is usually observational unless the tumors bleed, interfere with mastication, or do not resolve after delivery. Lesions surgically removed during pregnancy are likely to recur.¹¹



Figure 2. Oral Tumor During Pregnancy

Movable teeth

Teeth can loosen during pregnancy, even in the absence of gum disease, because of increased levels of progesterone and estrogen affecting the periodontium (the ligaments and bone that support the teeth).¹² For uncomplicated loose teeth not associated with periodontal disease physicians should reassure patients that the condition is temporary, and alone it will not cause tooth loss.

Gingivitis

Gingivitis is the most common oral disease in pregnancy, with a prevalence up to 75%.⁶ Approximately one half of women with pre-existing gingivitis have significant exacerbation during pregnancy.⁹ Gingivitis is inflammation of the superficial gum tissue. During pregnancy, gingivitis is aggravated by fluctuations in estrogen and progesterone levels in combination with changes in oral flora and a decreased immune response. Thorough oral hygiene measures, including tooth brushing and flossing, are recommended. Patients with severe gingivitis may require professional cleaning and need to use approved mouth rinses. An example of gingivitis during pregnancy is shown in figure 3.



Figure 3. Gingivitis During Pregnancy

Periodontitis

Periodontitis is a destructive inflammation of the periodontium affecting approximately 30 percent of women of childbearing age.³ The process involves bacterial infiltration of the periodontium and toxins produced by the bacteria stimulate a chronic inflammatory response, and the periodontium is broken down and destroyed, creating pockets that become infected, and eventually, the teeth loosen.¹³ This process can induce recurrent bacteremia, which indirectly triggers the hepatic acute phase response, resulting in production of cytokines, prostaglandins (PGE₂), and interleukins (IL-6, IL-8), all of which can affect pregnancy.¹⁴ Elevated levels of these inflammatory markers have been found in the amniotic fluid of women with periodontitis and preterm birth compared with healthy control patients.¹⁵ There is data where was found minimal oral bacteria in the amniotic fluid and placenta of women with preterm labor and periodontitis.¹⁶ It seems probable that this inflammatory cascade alone prematurely initiates labor. The mechanism is thought to be similar for low birth weight; the release of PGE₂ restricts placental blood flow and causes placental necrosis and resultant intrauterine growth restriction.¹⁷

An example of periodontitis during pregnancy is illustrated in figure 4.



Figure 4. Periodontitis During Pregnancy

Periodontitis has been associated with several poor pregnancy outcomes, although the mechanism by which this occurs remains unclear and controversy exists. Women with preexisting periodontal disease can reduce the risk of recurrence or worsening disease during pregnancy through proper oral hygiene. The American Academy of Periodontology recommends that all women who are pregnant or planning to become pregnant undergo a periodontal examination and any necessary treatment.¹⁸

Current Matter

In Albania, dental service is mostly private practice that covers up to 95 % of total dental service throughout the country. Pregnancy is a very special condition in women health which many physiological changes occur during pregnancy and also many pathological health problems are triggered during this period¹⁹. In Albania is a poor perception among pregnant population and unfortunately many medical staff as well about the oral care during pregnancy as it thought not to be safe where actually is very safe to perform most of dental procedures during pregnancy. In fact there is solid evidence based medicine that shows the connection with poor oral health care

and pregnancy consequences as bacterial infection, preterm birth, low birth weight and many other problems related to this matter. There are many guidelines made by college of physician, obstetrician and gynecologist and dental association that have outlined the importance of oral health care during pregnancy.

Conclusions

Every pregnant woman should be assessed for dental hygiene habits, access to fluoridated water, oral problems such as caries, gingivitis, and access to dental care. Oral examination should include the teeth, gums, tongue, palate, and mucosa. Patients should be counseled to perform routine brushing and flossing, to avoid excessive amounts of sugary snacks and drinks, and to consult a dentist. Status of and plans for oral health should be documented. Physicians and dentists should provide satisfactory medical information about oral health during pregnancy treat pregnant women, which can be done through education, clear communication, and the development of ongoing collaborative relationships. Physicians can share information on the safety of dental treatment in pregnancy with dental colleagues and provide clear referral recommendations.

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