and drugs. Dentists should counsel pregnant patients on the increased risk of negative consequences to the developing fetus if exposed to these substances.

Common oral conditions associated with pregnancy

Pregnancy induces physiologic changes in both hard and soft tissues of the oral cavity.[44,45] Nausea and vomiting are common during the first trimester and occur in up to 70% of pregnant women.[46] Acid from vomitus can cause demineralization and erosion of enamel, known as perimyolysis. A sodium bicarbonate rinse can neutralize the acidic challenge.[47] Immediate toothbrushing, however, can cause erosion/loss of the weakened enamel.[48] When erosion occurs, fluoride (eg, neutral sodium fluoride mouth rinse or gel) may be prescribed to minimize hard tissue loss and control sensitivity.[49] Some physicians advocate frequent snacking or eating multiple small meals throughout the day to help relieve morning sickness.[50] Sipping ginger ale or sucking ginger lollipops also has been recommended.[50] However, frequent exposure to cariogenic substances may increase the risk of developing caries.[51]

Pregnancy-associated hormonal changes may cause dryness of the mouth. Approximately 44% of pregnant participants in one study reported persistent xerostomia.[52] A palliative approach to alleviate dry mouth may include increased water consumption or chewing sugarless gum to stimulate salivation.[52]

Hormonal fluctuations during pregnancy—particularly increased progesterone and estrogen levels—contribute to greater vascularity, enhanced permeability, and potential tissue edema, all of which can further influence gingival health.[53,54] Gingivitis (eg, bleeding, redness, swelling, tenderness) often appears in the second trimester and peaks in the eighth month of pregnancy, with anterior teeth affected more than posterior teeth.[55] These findings may be exacerbated by poor/inadequate plaque control and mouth breathing.[56] Poor plaque control combined with hormonal changes also can contribute to the development of a pyogenic granuloma, commonly referred to as pregnancy tumor or granuloma gravidarum. This benign vascular lesion typically appears as a deep red to purple gingival nodule, often emerging during the second or third trimester of pregnancy.[56,57] While the lesion may regress after childbirth, surgical excision may be necessary if it persists or causes discomfort.[57]

Periodontal disease has been associated with adverse pregnancy outcomes such as preterm birth,[58,59] fetal growth restriction, low birthweight,[59] preeclampsia, and gestational diabetes.[60] The link between periodontal disease and adverse fetal outcomes is multifactorial, with both biological and behavioral elements (eg, poor prenatal care, smoking) potentially compounding the risk.[60,61] The development of more interventional trials would be beneficial,[58] as some studies have shown that the treatment of periodontal disease does not eliminate adverse pregnancy outcomes[62-64] and may put some women at a higher risk for preterm delivery.[62]

Recommendations: Oral health care professionals should council pregnant patients experiencing morning sickness or gastroesophageal reflux to rinse with a cup of water containing a teaspoon of sodium bicarbonate, and toothbrushing should be avoided for about 1 hour after vomiting to minimize dental erosion. Pregnant patients who alter their diet to combat morning sickness should be counseled on the negative effects of frequent exposures to sugary substances and the increased risk for developing caries with these practices. Pregnant patients should be encouraged to have routine dental examinations to be evaluated for commonly associated oral lesions. Oral health care providers should encourage pregnant patients to practice good oral hygiene, including brushing twice daily with fluoridated toothpaste and flossing, to minimize periodontal insult.

Oral health care during pregnancy

Patients who maintain regular dental care before pregnancy are more likely to continue receiving routine dental care during pregnancy.[48] Improving the oral health of pregnant patients reduces complications of dental diseases to both the mother and the developing fetus.[65] However, utilization of dental services during pregnancy remains inconsistent, with reported rates ranging from 16 to 83%.[66] Facilitators and barriers to oral health care during pregnancy include physiological conditions, low importance of oral health, negative stigma regarding dentistry, fear or anxiety towards dental treatment, mobility and safety, financial barriers, employment, time constraints, lack of information, health professionals' barriers, family and friends' advice, and beliefs and myths regarding the safety of dental treatment.[67]