

Oral Health Care for the Pregnant Pediatric Dental Patient

Latest Revision

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Abstract

This best practice provides recommendations regarding preventive, diagnostic, and therapeutic oral health care for pregnant youth. Recommendations emphasize the benefits of a noncariogenic diet and nutritious foods essential to proper fetal development. The safety of prescription and over-the-counter medications is reviewed, and oral health care practitioners are advised to maintain awareness of benefits, risks, and side effects of pharmacotherapeutic agents for pregnant patients. Likewise, practitioners should counsel patients regarding the negative consequences of exposure to smoke, tobacco, and illicit substances during pregnancy. Common oral conditions associated with pregnancy, such as dental erosion, dental caries, xerostomia, gingivitis, and pyogenic granulomas, are reviewed. Components of dental care that require special considerations for the pregnant patient include history intake, assessment of risk for caries and periodontal diseases, screening for hypertension, and timing of preventive, restorative, and emergency care. Radiation safety, with emphasis on the ALARA (as low as reasonably achievable) principle, is addressed. The document highlights patient education and anticipatory guidance to improve oral health during and after pregnancy. Establishing a dental home during pregnancy is critical to comprehensive care for both mother and child. Lastly, oral health care professionals are encouraged to review state laws and regulations pertaining to the consent of pregnant minors and minor confidentiality.

This document was developed through a collaborative effort of the American Academy of Pediatric Dentistry Councils on Clinical Affairs and Scientific Affairs to offer updated information and recommendations regarding oral health care for the pregnant pediatric dental patient.

KEYWORDS: INFORMED CONSENT; ORAL HYGIENE INSTRUCTION; PREGNANCY; PRENATAL CARE; TOBACCO COUNSELING

Purpose

The American Academy of Pediatric Dentistry (AAPD), as the oral health advocate for infants, children, adolescents, and individuals with special health care needs, recognizes that adolescent pregnancy remains both a public health and social issue that requires comprehensive support and intervention strategies. These recommendations focus on managing oral health care specific to the pregnant adolescent rather than outlining detailed treatment protocols for individual oral conditions.

Methods

Recommendations on oral health care for the pregnant adolescent were developed by the Council on Clinical Affairs Committee on the Adolescent, adopted in 2007,¹ and last revised in 2021.² This revision included a search of the PubMed/MEDLINE database using the terms: (*evidence-based dentistry* [MeSH], [Text word] *pregnancy* [MeSH] OR *pregnancy in adolescence* [MeSH] OR *teen pregnancy* [Text word] OR *pregnant teen* [Text word] OR *pregnant adolescent* [Text word] OR *adolescent pregnancy* [Text word]) AND (*oral health* [MeSH] OR *oral health* [Text word] OR *dental health* [Text word] OR *dental care* [MeSH]); filters: 10 years, humans, English. This search yielded 674 articles that met the defined criteria to update this document. The search then was narrowed to include articles that were limited to clinical trials, systematic reviews, or meta-analysis yielding 58 articles. Additional

strategies such as Google Scholar were employed. When data did not appear sufficient or were inconclusive, recommendations were based upon expert and/or consensus opinion by experienced researchers and clinicians.

Background

General considerations

Adolescent pregnancy (or childbearing) is a complex issue and more likely among socioeconomically disadvantaged adolescents.³ Teen birth rate is defined by the Centers for Disease Control and Prevention (CDC) as the number of births per 1000 females aged 15-19 years.⁴ In 2023, the provisional teen birth rate was 13.2 births per 1000, marking a 3% decline from 2022.⁴ While the current rate of unplanned pregnancy among US adolescents is unknown,⁵ a 2011 report⁶ found 75% of pregnancies in females ages 15-19 were unintended. Adolescent childbearing may present unfavorable consequences (eg, not completing high school) for mothers and imposes high public sector costs. Nearly two-thirds of teenage mothers

ABBREVIATIONS

AAPD: American Academy of Pediatric Dentistry. **FASDs:** Fetal alcohol spectrum disorders. **FDA:** US Food and Drug Administration. **HDP:** Hypertensive disorders of pregnancy. **MeSH:** Medical subject heading.

receive public assistance and have increased risk of living in poverty as they enter adulthood.⁷ Furthermore, the challenges of teen pregnancy may last generations, with children of teen mothers more likely to perform poorly in school or drop out, and daughters of teen mothers to become teen mothers themselves.⁸

Recommendations

General considerations

Proper prenatal care is essential. Oral health care professionals are in a position to encourage pregnant pediatric dental patients to seek routine care with their obstetrician and other primary care providers throughout their pregnancy. Likewise, obstetric care providers are able to counsel patients regarding good oral health habits, including the importance of professional oral health care during pregnancy. Dental visits during pregnancy are safe, effective, and encouraged.^{9,10}

Recommendations: Health care professionals should counsel patients on the safety and benefits of prenatal medical and dental care. Recommendations for adolescent oral health care can be found in the AAPD's *Adolescent Oral Health Care*.¹¹

Diet considerations during pregnancy

The diet of the pregnant adolescent can affect the health of the child. A healthy diet is necessary to provide adequate amounts of nutrients for the mother-to-be and the unborn child. Nutrients of particular importance include folic acid, iron, calcium, vitamin D, choline, omega-3 fatty acids, B vitamins, and vitamin C.¹² Vitamin D works with calcium to help the bones and teeth of the fetus develop.¹² Folic acid, a B vitamin, plays an important role in the production of cells and helps in the development of the neural tube, the brain, and spinal cord.^{12,13} Folic acid supplementation has been shown to decrease the risk of isolated cleft lip with or without cleft palate.¹⁴⁻¹⁶

Studies have shown that improving the nutritional status of women prior to and during pregnancy can substantially reduce the risk of low-birth-weight babies.¹⁷ In addition, diabetes (type 1 or 2) during pregnancy has been associated with cleft lip and palate in fetuses.¹⁸ Dietary habits during pregnancy also can affect the oral health of the adolescent. Nausea and vomiting, which are common symptoms during the first trimester, may cause a woman to modify food choices or avoid routine oral health practices such as toothbrushing and flossing. In addition, cravings for carbohydrate-rich foods may increase the risk for dental caries.

Recommendation: Oral health care professionals should encourage pregnant patients to consume noncariogenic, nutrient-dense foods to promote the general and oral health of the mother and developing fetus.

Pharmacotherapy during pregnancy

Accessibility of current information on the potential effects of medications during pregnancy is important for improving health care professionals' prescribing practices and patient

safety.¹⁹ In 2014, the US Food and Drug Administration (FDA) updated requirements for labeling of human prescription drugs and biological products via the Pregnancy and Lactation Labeling Rule.²⁰ Labeling must include usage information (eg, risks of the medication, clinical considerations, fertility effects) for specific populations including pregnancy, lactation, and females and males of reproductive potential.²⁰ Searchable information on prescription medication labeling can be found at *DailyMed*,²¹ the official provider of FDA label information. Some prescription medications such as doxycycline and tetracycline (both antibiotics), as well as alprazolam and diazepam (both anxiolytics), should be avoided.²² Certain anticonvulsants (eg, topiramate, valproic acid) during pregnancy have been associated with cleft lip and palate in fetuses.¹⁸ Federal regulations require labeling for over-the-counter (OTC) medications to include specific warnings such as contraindications, when to consult a doctor or pharmacist, and considerations with pregnancy/breastfeeding.²³ Over-the-counter medications to be avoided by pregnant patients include medications for gastrointestinal upset/diarrhea that contain bismuth subsalicylate, decongestants (eg, phenylephrine, pseudoephedrine), cough and cold medicines that contain guaifenesin, and pain medications such as ibuprofen, naproxen, and aspirin.²² When in doubt, consultation with the patient's obstetrician is warranted.

Recommendations: Oral health care professionals should consider the potential effects of medications they recommend for pregnant patients. They also should counsel pregnant patients to avoid medications that cross the placenta and pose risks to fetal development.

Effects of smoke, tobacco, alcohol, and illicit substance exposure during pregnancy

Education on the serious health consequences of tobacco use and fetal exposure to tobacco and other environmental smoke is an important component of prenatal counseling. Gestational exposure to polycyclic aromatic hydrocarbons (PAHs) (compounds found in smoke from tobacco, coal, or other sources of combustion and in charbroiled foods) increases fetal risk of cleft lip with or without cleft palate.^{24,25} Prenatal exposure to secondhand smoke has been associated with cognitive deficits.²⁶ Oral health care professionals play a crucial role in discouraging tobacco use and educating patients about the significant health risks associated with both direct tobacco consumption and exposure to environmental tobacco smoke (ETS). These efforts contribute to reducing the incidence of tobacco-related diseases and promoting healthier lifestyles.²⁷

There is no known safe amount of alcohol use during pregnancy.^{28,29} Alcohol use during pregnancy is known to cause miscarriage, stillbirth, and lifelong birth defects and developmental disabilities.³⁰ Children with fetal alcohol spectrum disorders (FASDs) may present with abnormal facial features (eg, smooth philtrum), small head size, shorter than average height, low body weight, poor coordination, sleeping and sucking problems as baby, vision or hearing problems, speech and

language delays, intellectual disabilities, learning disabilities, poor reasoning and judgment skills, hyperactive behavior, difficulty with attention, poor memory, difficulty in school, and problems with heart, kidney, or bones.²⁸ FASDs may affect as many as 1 in 20 US school-aged children.³¹ Individuals with FASDs can face lifelong challenges that impact their development, learning, and daily life.³¹ Screening for alcohol use and providing counseling may help decrease the risk of FASDs and harm to the infant.^{28,32} Early recognition, diagnosis, and prevention can reduce negative outcomes and lifelong consequences for the child.²⁹

Individuals who misuse substances (eg, opioids) may do so regularly or only occasionally.³³ Sexually active adolescents who misuse substances have high rates of sexual-risk behaviors, unintended pregnancy, and repeated unplanned pregnancy.³⁴⁻³⁷ Therefore, substance misuse among pregnant adolescents represents a major public health problem.

Substance misuse during pregnancy is associated with an increased risk for stillbirths and neonatal abstinence syndrome.^{38,39} Neonatal abstinence syndrome occurs when fetal exposure to licit or illicit substances used during pregnancy is abruptly discontinued, leading to withdrawal symptoms (eg, tremors, irritability, feeding difficulties, respiratory distress) in newborns.^{40,41} Evidence-based prevention measures, including promotion of family planning and expanded access to comprehensive obstetric care, can help safeguard maternal and infant health, reduce the incidence of adverse birth outcomes, and offer critical support to individuals facing substance misuse challenges.^{42,43}

Recommendations: Oral health care professionals should be aware of and recommend pregnant patients avoid substances that cross the placenta and potentially harm the developing fetus. Pregnant pediatric dental patients should be encouraged to avoid smoking, exposure to smoke, and use of alcohol 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 as many as 70% of pregnant women.⁴⁶ Acid from vomitus can cause demineralization and erosion of enamel, known as perimylolysis. 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, gingival 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^{58,59,60} (eg, preterm birth, fetal growth restriction, low birthweight, preeclampsia, and gestational diabetes). 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 studies⁶²⁻⁶⁴ have shown that the treatment of periodontal disease does not eliminate adverse pregnancy outcomes and may put some women at a higher risk for preterm delivery.

Recommendations: Oral health care professionals should counsel 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

Pregnant adolescents without a regular dental home would benefit from an oral examination and a comprehensive assessment of caries and periodontal risks. Seeking professional oral health care during the first trimester promotes optimal maternal and fetal health. The initial visit would entail thorough review of medical, dental, and social histories and a comprehensive evaluation. The dental history addresses diet and fluoride use, preexisting oral conditions, current oral hygiene practices and preventive home care, previous radiographic exposures, and tobacco and other substance use.^{9,10,68} Historical and clinical findings can be used to determine the patient's risks for caries and periodontal disease and to develop an individualized treatment plan.

Hypertensive disorders of pregnancy (HDP) remain one of the major causes of pregnancy-related maternal and fetal morbidity and mortality worldwide.⁶⁹ Adolescents are at a higher risk than average-aged mothers for pregnancy-related hypertension and its complications.⁷⁰ Blood pressure greater than or equal to 140/90 mmHg is considered mild hypertension, whereas values greater than or equal to 160/110 mmHg are considered severe hypertension.⁷¹ HDP includes chronic (pre-existing) essential hypertension, pregnancy-induced hypertension, pregnancy-induced hypertension with superimposed preeclampsia, and hypertension with eclampsia (seizures). Preeclampsia (target organ involvement) typically is characterized by new-onset hypertension with proteinuria occurring after 20 weeks of gestation.⁷² Blood pressure oscillates during pregnancy, trending downward in the first trimester and increasing toward the third trimester. To better identify those at risk for HDP and accurately classify the subtype, baseline prepregnancy blood pressure ideally would be established. Blood pressure readings after 20 weeks gestation may be more reflective of baseline levels than those taken in the first half of pregnancy.⁷² Untreated severe hypertension significantly increases the risk of morbidity (bleeding and hemorrhagic stroke) and mortality.^{69,73}

Preventive services are critical components of oral health care for the adolescent pregnant patient. Ideally, a dental prophylaxis would be performed during the first trimester and again during the third trimester if oral home care is inadequate or periodontal conditions warrant professional care. The vertical transmission of bacteria associated with dental caries from caregiver to child is well documented.^{74,75} Suppression of the mother's reservoirs of *Mutans streptococci* by dental rehabilitation and antimicrobial treatments may prevent or at least delay infant acquisition of these cariogenic microorganisms.⁷⁶ Transmission of cariogenic bacteria from mother to infant is

increased when the mother has poor oral health with untreated dental caries.⁷⁷

During pregnancy, elevation in sex steroid hormones occurs which may modify the gingival inflammatory response and result in an exaggerated gingival inflammation in the presence of even relatively small amounts of plaque.⁷⁸ Referral to a periodontist may be necessary in the presence of progressive periodontal disease.^{55,79} While fluoridated dentifrice and professionally-applied topical fluoride treatments can be effective caries preventive measures for the expectant adolescent, evidence does not support the use of fluoride supplements (tablets, drops, lozenges, chewing gum) to benefit the fetus.⁸⁰

Because the pregnant uterus is below the umbilicus, a pregnant woman generally is more comfortable for treatment during the second trimester. Pregnant women are considered to have a full stomach due to delayed gastric emptying and, therefore, are at increased risk for aspiration, particularly during the last trimester.⁸¹ In general, non-emergency dental treatment needed during the third trimester would be postponed until after birth due to the risk of premature labor and discomfort from lying on one's back for an extended period of time.⁸² When treating pregnant patients, especially during their third trimester, correct positioning is essential to avoiding complications. Lying flat on the back can compress the inferior vena cava, reducing venous return to the heart, which can cause supine hypotensive syndrome.⁸³ This condition may lead to dizziness, nausea, and a drop in blood pressure.⁸³ Positioning the patient on her left side during procedures may help prevent this.⁸³ Elevating the right hip slightly with a pillow or towel can further relieve pressure on the vena cava, promoting better circulation and preventing hypotensive episodes.⁸³

Common invasive dental procedures may require certain precautions during pregnancy, particularly during the first trimester. The recommended scheduling for non-urgent dental procedures is the second trimester (weeks 13-28) when the balance between maternal comfort and safety for the developing fetus may be optimized.^{82,83} Performing elective restorative and periodontal therapies during the second trimester may prevent any dental infections or other complications from occurring in the third trimester.⁸⁴ However, a pregnant patient experiencing dental pain or infection requires immediate treatment.

When contemplating agents to provide local anesthesia or sedation as well as medications to manage infection or post-operative pain, consideration is given to the potential benefits of dental therapy versus the risks to the pregnant patient and the fetus. Selecting the safest medication, limiting the duration of the drug regimen, and minimizing dosage^{10,85} promote patient safety.

Nitrous oxide/oxygen analgesia/anxiolysis may facilitate the delivery of dental care for a pregnant adolescent when topical and local anesthetics alone are inadequate.^{86,87} Consultation with the prenatal medical care provider is indicated prior to its use, and precautions are needed during treatment to prevent hypoxia, hypotension, and aspiration.^{85,87} Due to the increased risk of pregnancy loss, use of nitrous oxide may be

contraindicated in the first trimester of pregnancy.^{85,87} Nitrous oxide is an effective analgesic and anxiolytic agent that can be used safely for pregnant patients in need of urgent dental care during the second and third trimesters.^{88,89} Systemic risks are minimized when nitrous oxide is administered at the lowest effective concentration for the shortest duration.⁸⁸ Proper ventilation and scavenging systems further reduce exposure, ensuring safe use for both patients and health care personnel.⁸⁸

If more-advanced behavior guidance regimens such as moderate sedation or general anesthesia are needed, postmenarchal patients who have not disclosed a pregnancy may be subjected to a pregnancy test prior to treatment. Pregnancy testing has been recommended for a female patient of childbearing age undergoing sedation or anesthesia or when the results would alter the patient's medical management.⁹⁰ General anesthesia can be used safely during pregnancy when medically necessary.⁹¹ However, it carries inherent risks, requiring careful planning and coordination between anesthetic and obstetric teams to ensure the safety of both mother and fetus.⁹¹

In 2020, the FDA encouraged practitioners to avoid using dental amalgam in pregnant women, women planning to become pregnant, women who are nursing, and children under 6 years of age.⁹² However, the American Dental Association reaffirmed amalgam is a safe, affordable, and durable restoration and that the FDA warning did not present any new information.⁹³ The American Dental Association recommends dentists discuss all restorative options with their patients, including the risks and benefits to amalgam use.⁹³

Dental bleaching is known to have side effects (eg, tooth sensitivity, tissue irritation) in the general population⁹⁴ and has not been studied in pregnant patients. Due to potential safety concerns with bleaching agents, postponing teeth whitening during pregnancy has been advised.^{10,82,95} For more information regarding bleaching, refer to the AAPD's *Policy on the Use of Dental Bleaching for Child and Adolescent Patients*.⁹⁴ In general, deferring elective dental treatment that is not medically necessary should be postponed until after delivery to help minimize risk to patient and fetus.⁸²

There is no universally recognized threshold for some radiation effects (stochastic effects); the risks of radiation exposure should always be weighed against the risks of not performing the procedure.⁹⁶ No single diagnostic radiograph has a radiation dose significant enough to cause adverse effects in a developing embryo or fetus.^{9,10,82} Radiographs are an integral component of a comprehensive dental examination and can help the oral health care professional in assessment of dental disease and pathology and development of a treatment plan. However, because the effects of ionizing radiation accumulate over time, the oral health care professional must weigh the risks and benefits of taking radiographs in a pregnant patient.⁹⁷ The decision to obtain radiographic imaging is based on the patient's history and clinical examination.⁹⁷ During dental radiographic examination of all patients, including pregnant patients, optimizing techniques, choosing the fastest available image receptor (eg, high-speed film, digital

radiography), collimation of beam to size of receptor, and avoiding retakes help minimize radiation exposure.^{9,97,98} When a dental radiographic examination is conducted properly, the amount of radiation striking a patient's abdomen is negligible.⁹⁷ For diagnostic radiology outside of the abdomen and pelvis, including the head and neck, the amount of radiation to which a fetus is exposed is a very low dose and, when standard precautions are taken, does not pose a significant risk to the fetus.⁹⁶ Following the ALARA (as low as reasonably achievable) principle helps dentists minimize the patient's exposure.⁹⁷ The use of cone-beam computed tomography (CBCT) is not addressed in this document, and consultation with a patient's obstetrician/gynecologist is recommended prior to its use. Numerous health care organizations no longer support the routine use of lead aprons or thyroid collars.⁹⁹⁻¹⁰¹ The Image Gently Alliance, supported by more than 80 health care organizations, advocates minimizing radiation exposure by tailoring radiographic examinations to the specific needs of patients.¹⁰²

Education is an essential component of prenatal oral health care and may have a significant effect on the oral health of both the mother and the child. Counseling for the pregnant adolescent includes topics directed toward all adolescent patients (eg, dietary habits, injury prevention, third molars), as well as oral changes that may occur during pregnancy and infant oral health care. Since the pregnant adolescent may be receptive to information that will improve the infant's health, anticipatory guidance can be introduced to focus on the needs of the child at each stage of life. Studies have documented that early oral health promotion starting during pregnancy can lead to a sustained and long-term improvement of the oral health of children.^{103,104} Programs that promote oral health must continue to inform pregnant women and care providers about the importance of dental care before, during, and after pregnancy. Oral health counseling during pregnancy and dental cleanings are recommended.¹⁰⁵

Recommendations: Oral health care professionals should provide thorough counseling to pregnant dental patients on the benefits of prevention to both maternal and infant health. Continuation with routine dental care during pregnancy, including in-office dental examinations, prophylaxis, and fluoride treatments, is encouraged. Pregnant pediatric dental patients should be made aware that pregnancy may lead to oral changes (eg, xerostomia, shifts in oral flora).^{55,79} An individualized preventive plan for each pregnant patient should address effective home care, including brushing 2 times daily with fluoridated toothpaste and daily flossing. Dietary counseling should focus on overall nutrient and energy needs,^{75,106} vitamin supplements,^{13,16,107} and avoidance of frequent exposures to cariogenic foods and beverages.

Pregnant pediatric patients also should be made aware of the relationship between maternal oral health and fetal health⁷⁵ (eg, possible association of periodontal disease with preterm birth and preeclampsia, developmental defects in the primary dentition¹⁰⁷). Furthermore, they should be provided with

anticipatory guidance on infant oral health^{103,104,108} that includes discussion of vertical transmission of *Mutans streptococci* postpartum and the importance of early establishment of a dental home. Other applicable components of anticipatory guidance for adolescent patients include injury prevention, oral piercings, tobacco and substance abuse, sealants, and third molar assessment.¹¹

All radiographic procedures should be conducted in accordance with radiation safety practices. If dental treatment is deferred until after delivery, radiographic assessment also should be deferred. The optimal time to perform restorative and periodontal treatment is during the second trimester, as it offers the best balance for maternal and fetal safety, minimizing risks associated with dental infections or complications later in pregnancy. Elective dental procedures should be postponed until after delivery. Consultation with the patient's obstetrician or primary care provider may be warranted before the use of local anesthesia, nitrous oxide, over-the-counter pain medications, or prescriptions. The use of vasoconstrictor (ie, epinephrine) in local anesthetics is contraindicated for hypertensive pregnant patients due to its potential to exacerbate cardiovascular risks and raise blood pressure further.¹⁰ Oral health care professionals should evaluate a pregnant pediatric dental patient's blood pressure at every dental visit.¹⁰ If a pregnant patient presents with elevated blood pressure ($\geq 140/90$ mmHg) during a dental visit, an immediate referral to the obstetrician is needed to rule out potential complications (eg, HDP including preeclampsia) and ensure timely medical management.^{3,71,109} During dental treatment, positioning the patient in a semi-supine position with a slight leftward recline can help regulate blood pressure and minimize fluctuations.¹¹⁰

Legal considerations

Dental practitioners should be familiar with federal and state statutes that govern consent for care for a pregnant patient less than the age of majority. Statutes and case law concerning consent involving pregnant patients less than 18 years of age vary from state to state. In some states, dentists are required to obtain parental consent for non-emergency dental services provided to a child 17 years of age or younger who remains under parental care.¹¹¹ This would involve obtaining consent from the parent who must be aware of the pregnancy in order to understand the risks and benefits of the proposed dental treatment.⁸⁴ However, if the parent is unaware of the pregnancy, the pregnant adolescent may be entitled to confidentiality regarding health issues such as the pregnancy.¹¹² In other states, mature minor laws allow minors to consent for their own health care when a dentist deems the minor competent to provide informed consent. In addition, some states emancipate minors who are pregnant or by court order. Practitioners are obligated to be familiar with and abide by the laws specific to where they practice and where the patient resides. If a pregnant adolescent's parents are unaware of the pregnancy, and state laws require parental consent for dental treatment, the adolescent is encouraged to inform them so

appropriate informed consent for dental treatment can occur. The Health Insurance Portability and Accountability Act (HIPAA) specifically addresses minor confidentiality.¹¹³

Recommendation: Oral health care professionals should follow their state's regulations regarding consent and care of pregnant pediatric dental patients to ensure both legal compliance and patient safety.

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