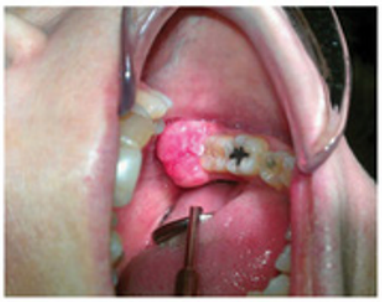
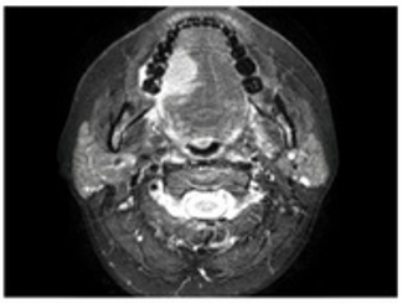
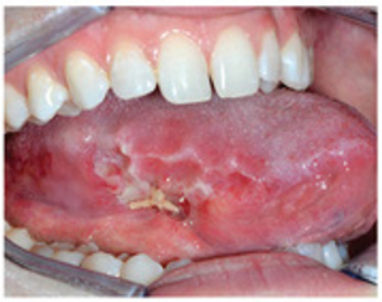
Dental Management of the Pregnant Patient

Edited by Christos A. Skouteris

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Edited by

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Dedications

In loving memory of my parents Antonios C. Skouteris, MD (1915–2008), Obstetrician-Gynecologist, and Maria A. Skouteris, CRN, (1918–1997), Chief Maternity Nurse.

To my family Kiki, Konstantinos, Eleni, Milou, Jolie, Perry, and Regina for their unconditional love and support.

To my mentor, George C. Sotereanos, DMD, MS, Oral and Maxillofacial Surgeon, a man of few words but with a wealth of experience and wisdom.

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Preface

Pregnancy is a unique and momentous experience in a woman's life. As such, a comprehensive approach to the management of oral health problems that a woman may face during gestation becomes a necessity. My interest in embarking on the preparation of this book has three sources. First, the influence from my family environment. Both my parents were healthcare practitioners who worked in the area of obstetrics and gynecology throughout their professional lives. At an early age, I recall often listening with interest to long discussions on their experiences with pregnant patients. I started to realize the challenges that they had to face and I came to appreciate how deeply they cared about both the mother and the newborn child. In later years, as a dental student, I used to assist in the delivery room and in gynecologic surgical procedures and witnessed the miracle of childbirth. Although I had already made my career choice, I developed an interest in the care of the pregnant patient as a result of my early exposure to the intricacies of gestation. This interest was further augmented when I provided secretarial assistance to my father during his writing of two textbooks, one on menstruation and the other, a two-volume textbook on obstetrics and gynecology. Through my involvement in these projects, I learned a lot about the complexity of maternal physiology, the pathological conditions of pregnancy, and the potential risks that may complicate labor and delivery. It is only unfortunate that my father never had the opportunity to see his work published.

Then came the opportunity to provide surgical services to pregnant women during my academic and professional career as an oral and maxillofacial surgeon. Caring for pregnant women is an inimitable experience because in reality care is provided to two individuals, the mother and fetus. Even simple interventions may play an important role in achieving a successful outcome during dental treatment of an expectant woman and may prevent future implications on the quality of life of both mother and newborn. The well-being of both has to be the primary concern of the health provider.

Refreshing and updating my knowledge of the surgical management of the pregnant patient was dictated by the fact that proper care must be provided while assuring the safety of the mother and unborn child. Through my interaction with pregnant patients, I recognized that the management of their health issues needed to be urgent and decisive, often requiring a very thorough multidisciplinary intervention by a team of experienced professionals.

Finally, my pursuit of knowledge in the management of the pregnant patient showed that a more broad and systematic view on the treatment of maternal oral health issues was required. There are noble efforts in the literature to address the subject of oral health maintenance during pregnancy, but an in-depth approach is needed in view of recently published research data and advances in treatment modalities in many of the disciplines of medicine and dentistry that

have a direct bearing upon the management of maternal morbidity. Moreover, there is insufficient discussion in the dental literature on the medical, obstetric, and gynecologic emergencies or familiarization of the oral health professional with the appropriate response in such circumstances. The importance of discussing with other specialists, in a holistic approach, the systemic and oral health problems during pregnancy is amply emphasized in this book, since the complexity of the pregnant state and maternal health management provide the perfect grounds for developing interprofessional collaboration. An interprofessional approach to the pregnant patient's needs leads to decisions that safeguard the safety and quality of life of the patient and fetus, while always considering and respecting patient autonomy. The decisions that are made can have a far-reaching impact on the immediate family and social environment of the pregnant patient.

The book also addresses the all-important issue of preparing for unexpected events. Many nonphysician public safety groups (paramedics, firefighters, police) have training in the handling of a prehospital event such as maternal cardiac arrest, impeding labor, and even on-scene delivery. There is practically no mention of such an event and its management in the dental literature related to care of the pregnant patient. Cardiac arrest during pregnancy and prehospital (on-scene) delivery in the dental office can be a potentially real situation and should be given its due attention. All these topics are discussed in the book and are supported by time-honored, recent, and current literature resources, quick-reference tables, and illustrations.

The book's intended readership includes dental and dental hygiene students, general dentists, dental hygienists, dental faculty, oral and maxillofacial surgeons, and specialized dentists in other disciplines of dentistry. This book could also be a useful reference source for physicians in the practice of general and family medicine.

I am indebted to the chapter contributors for embracing this project with warmth and enthusiasm and for offering their valuable input in the fields of their interest and expertise.

September 2017

Christos A. Skouteris, DMD, PhD
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1

Ethical Issues in the Treatment of the Pregnant Patient

Christos A. Skouteris

Ethical principles and the rights of the mother and fetus for the provision of proper medical and dental care are closely intertwined. These principles are based on the fact that care is actually provided to two individuals. Since the mother is the life support of the fetus, the medical and dental status of the mother should be optimized during pregnancy. Therefore, necessary medical and dental treatment should not be denied to any female patient because of pregnancy.

Dental procedures, however minor, are associated with increased patient anxiety levels, the need for imaging, and the administration of medications. For these reasons, elective dental procedures should be postponed until postpartum. However, when a pregnant patient is in need of emergency, preventive, or restorative treatment, the aforementioned reasons may force the dentist to refuse treatment because of concern for the mother and the unborn child and the fear of liability and litigation if something happens to the pregnancy and the fetus. Denial of treatment, however, raises serious ethical issues. Thomas Raimann (2016), in response to the question whether it is ethical for dentists to refuse seeing pregnant women until after they give birth, laid out the ethical principles of the ADA Code of Ethics that particularly apply in the dental management of the pregnant patient (Box 1.1).

The principle of patient **Autonomy** (self-governance) **and Involvement** states that "The dentist should inform the patient of the proposed treatment in a manner that allows the patient to become involved in treatment decisions." Patient involvement in treatment decisions is highly desirable and ethical; however, pregnant women who have medical needs during pregnancy should not be expected to weigh the risks and benefits when they have to decide whether to proceed with a proposed treatment whose impact on the fetus is unknown. This is an impossible demand; no one can weigh unknown risks and benefits. On the other hand, a straight denial of treatment by the dentist without patient involvement becomes a unilateral decision and thus ethically questionable.

The principle of **Nonmaleficence** (do no harm) expresses the concept that professionals have a duty to protect the patient from harm. Under this principle, the dentist's primary obligations include keeping knowledge and skills current. Denying treatment to a pregnant patient violates this principle in the sense that it is evidence of lack of knowledge on the dentist's part. Evidence-based studies have shown that necessary dental procedures can be performed during the second trimester of pregnancy without an increased risk for serious medical adverse events, spontaneous abortions, preterm deliveries, and fetal malformations. The conservative approach of discouraging treatment because of lack of knowledge about the effects of a procedure and/or medication is not typically erring on

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