

**LETTER TO THE EDITOR**

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The Guidelines on Oral Health Care for the Pregnant Adolescent¹ of the American Academy for Pediatric Dentistry (AAPD) provides a revision of the latest literature regarding oral pathology and current treatment strategies for adolescent patients.¹ These guidelines contain essential hygiene and dietary regimens for pregnant adolescents. Increased incidences of oral pathologies such as caries, periodontitis, xerostomia, gingivitis, and tooth mobility are particularly noteworthy. They are all attributed to changes in hormonal levels, constant vomiting or reflux symptoms, and carbohydrate loading during pregnancy.

Notably, Murphey² also relates oral complications to lack of patient information regarding oral health, and oral care access to reach optimal oral health. Precautions that must be taken during the first trimester are also mentioned; as dental professionals must balance the probable benefits of dental treatment with the potential risks for the pregnant adolescent and the fetus.

Undoubtedly, the AAPD's guidelines provide a well-structured patient care plan focused on achieving the best possible outcome for pregnant adolescents. However, we have a number of comments aimed at enhancing oral care for special patient populations, currently not included in the guidelines, such as HIV+/AIDS pregnant adolescents.

Pregnant HIV+/AIDS adolescents patients should be managed with specific treatment strategies to avoid complications and damage to the fetus. Senise *et al.*³ state that actual treatment plans focus on preventing mother-to-child transmission, as well as ensuring proper precautions in regards to the teratogenicity of high intensity antiretroviral therapy (HAART). The currently preferred HAART treatment includes the use of two nucleoside reverse transcriptase inhibitors plus a protease inhibitor or non-nucleoside analog reverse transcriptase inhibitor. The use of these drugs has led to a substantial decrease in the frequency of HIV transmission from mother to child. Likewise, the frequency of oral problems has been reduced by more than 30% with the use of HAART, associated to a reduction of HIV viral load and

Considerations in the oral care of HIV+/AIDS pregnant adolescents.

recovery of the immune system.⁴ However, viral reappearance with drug-resistant microorganisms is an emergent phenomenon. This phase of failing HAART is when the HIV load increases the transmission of drug-resistant HIV to vulnerable patients. In countries where no specific HIV treatment is available, health strategies are focused on the eradication of opportunistic diseases, and even this strategy is hard to carry out.

Current guidelines^{1,3} emphasize the need for precautions when administering drugs to adolescent pregnant patients. However, we believe oral pathology treatments are not taking into consideration HIV+/AIDS patients who are already undergoing HAART. If proper precautions are not taken while administering antiretroviral drugs, pregnant adolescent patients may develop oral and systemic side effects such as anemia, hepatotoxicity, preterm delivery, pre-eclampsia, lipodystrophy, mitochondrial toxicity, glucose intolerance, erythema multiforme, congenital abnormalities, hyperpigmentation, cheilitis, ulcers, perioral paresthesia, and others.⁴

Moreover, oral manifestations are very important early indicators of an HIV infection. There are three groups of early oral manifestations of AIDS: the first group includes oral candidosis (erythematous, pseudomembranous, angular cheilitis), herpes simplex virus infection, linear gingival, parotid enlargement, recurrent aphthous ulcers; the second group involves viral infections (cytomegalovirus, papillomavirus, herpes zoster virus, molluscum contagiosum, herpes simplex virus), erythema necrotizing ulcerative gingivitis, hairy leukoplakia and necrotizing ulcerative periodontitis, unusual ulcers and salivary glands illness; and finally, the third group is characterized by osteomyelitis, tuberculosis-related ulcers, squamous cell carcinoma and Kaposi sarcoma.

Furthermore, there are many non-pharmacological factors that have been associated with an intensification of adverse events, as the coinfection with hepatitis C virus or fungal infections. For these reasons, permanent oral health



care should be incorporated as a part of the management of HIV+/AIDS pregnant adolescents. The identification, management and prevention of oral manifestations should be a priority for every dental professional. However, clinical indicators may not appear in all pregnant adolescents, and we must accept that it is difficult to establish if these patients are HIV+. That said, it is important that this information must be included in the infection control guidelines for the clinical practice.

AAPD's guidelines¹ regarding oral pathology care for the pregnant adolescent population lack appropriate information aimed at pregnant HIV+/AIDS adolescent patients. Oral health is strongly connected with physical and emotional health, and there are important increases in oral health needs in HIV+/AIDS individuals, especially during

pregnancy. The current literature available²⁻⁵ has limited information regarding the above-mentioned specific patient group. We suggest a deep and thorough analysis, as well as the development of specific guidelines to provide the targeted population with proper oral health care.

GREGORIO GARZA. MD

Health Sciences Division, University of Monterrey,
Monterrey, NL, Mexico.

HECTOR MARTINEZ. MSc

Department of Orthodontics, Pediatric Dentistry and
Special Care, University of Louisville, KY, USA.

GERARDO RIVERA. PhD

Health Sciences Division, University of Monterrey,
Monterrey, NL, Mexico.

REFERENCES.

1. American Academy on Pediatric Dentistry Council on Clinical Affairs Committee on the Adolescent. Guideline on oral health care for the pregnant adolescent. *Pediatr Dent*. 2008-2009;30(7 Suppl):102-6.
2. Murphey C. Oral health experiences of pregnant and parenting adolescent women: a qualitative descriptive study. *Int J Nurs Stud*. 2013;50(6):768-75.
3. Senise JF, Castelo A, Martínez M. Current treatment strategies, complications and considerations for the use of HIV antiretroviral therapy during pregnancy. *AIDS Rev*. 2011;13(4):198-213.
4. Yengopal V, Kolisa Y, Thekiso MD, Molete MP. The child and adolescent with HIV in resource poor countries. *Oral Dis*. 2016;22(Suppl 1):25-34.
5. Leao JC, Ribeiro CM, Carvalho AA, Frezzini C, Porter S. *Clinics (Sao Paulo)*. 2009;64(5):459-70.