

Michele Follen, MD, PhD

Department of Obstetrics and Gynecology and Institute for Women's Health and Leadership, Drexel University College of Medicine, Philadelphia, Pennsylvania

The objective of this study is to present a case series of oral precancers and cancers that have been photographed during larger ongoing clinical trials. More than 100 patients have been measured at 2 comprehensive cancer centers and a faculty practice associated with a major dental school. Each site is conducting independent research on the sensitivity and specificity of several optical technologies for the diagnosis of oral neoplasia. Optical spectroscopy was performed and biopsies obtained from all sites measured, representing abnormal and normal areas on comprehensive white light examination and after use of a fluorescence and reflectance spectroscopy device. The cases presented in this case series are taken from the larger database of images from the clinical trials using the optical spectroscopy device. The gold standard of test accuracy is the histologic report of biopsies read by the study histopathologists at the 3 study sites. Comprehensive white light examination shows some lesions; however, the addition of a fluorescence image and a selected reflectance wavelength is helpful in identifying other characteristics of the lesions. The addition of the violet light-induced fluorescence excited at 405 nm provides an additional view of both the stromal neovasculature of the lesions and the stromal changes associated with lesion growth that are biologically indicative of stromal breakdown. The addition of 545 nm green-amber light reflectance increases the view of the keratinized image and allows the abnormal surface vasculature to be more prominent. Optical spectroscopy is a promising technology for the diagnosis of oral neoplasia. The conclusions of several ongoing clinical trials and an eventual randomized Phase III clinical trial will provide definitive findings that sensitivity is or is not increased over comprehensive white light examination.

Baseball Players, a High Risk Group of Men for the Development of Oral Cancer

Michele Follen, MD, PhD

Department of Obstetrics and Gynecology and Institute for Women's Health and Leadership, Drexel University College of Medicine, Philadelphia, Pennsylvania

Background: As part of providing good patient care to a group at high risk for oral cancer, the Arizona School of Dentistry & Oral Health (ASDOH) faculty and students offer conventional oral examinations to Major League Baseball (MLB) players during their spring training physicals in Phoenix, Arizona (affectionately referred to as the Cactus League). This year, in addition to giving the conventional oral examinations, the ASDOH evaluated the Trimira Identafi 3000, a new multispectral oral cancer examination device, in a pilot study of 261 players. **Methods:** The procedures for a conventional white light examination and for use of the Identafi 3000 were reviewed with both faculty and dental students. Informed consent was obtained from each player. The instrument provides illumination in white light, 525 nm green-amber light, and 405 nm violet light. The engineering group also devised a 12-item questionnaire about the device that used a Likert scale (1 = poor to 5 = excellent) and administered it to faculty and students at end of the examination of the players. **Results:** The faculty and students screened 261 MLB players with both conventional

white light examination and the Identafi 3000. Thirty examinations were deemed abnormal. These patients will return this spring for evaluation and treatment. The questionnaire results revealed that examiners found benefit from the brighter white light and mirror, as well as from both fluorescence and reflectance wavelengths. **Conclusions:** Thirty abnormalities were detected among 261 players screened. This pilot trial of the Identafi 3000 found value in use of the device compared with conventional white light examination. Use of the instrument was easily disseminated among 15 examiners, and the baseball players with abnormalities will be followed this year and biopsied as needed if lesions are found.

The Moderating Effect of Maternal-Fetal Attachment on the Relationship Between Health Related Locus of Control and Prenatal Health Behaviors: Implications for HIV Risk Reduction During Pregnancy

Sara Levine Kornfield, MS¹; Angela Jiang, BS²; and Pamela A. Geller, PhD¹

¹Department of Psychology, College of Arts and Sciences, Drexel University, Philadelphia, Pennsylvania; and ²Master of Medical Science Program, Drexel University College of Medicine, Philadelphia, Pennsylvania

Pregnancy is an understudied time in a woman's life in relation to HIV risk behaviors. Currently in the United States, young women of childbearing age are the fastest growing group of people with new HIV diagnoses. Pregnancy presents an important time in a woman's life for added HIV prevention behaviors, as HIV exposure during pregnancy could lead to delivery of an infected infant. Unfortunately, pregnancy is generally regarded as a time when HIV preventative behaviors, specifically condom use, decrease, as most women report using condoms specifically for pregnancy prevention. Maternal-fetal attachment (MFA), a characteristic specific to pregnancy, describes the relationship between a pregnant woman and the developing fetus. This study hypothesized that MFA moderates the relationship between AIDS-related locus of control and engagement in positive prenatal health behaviors. Data analysis revealed a significant interaction between MFA and AIDS-related locus of control such that higher levels of MFA and locus of control predicted higher levels of engagement in positive prenatal health behaviors, whereas subsequent combinations of lower levels of each of these variables were less likely to result in good adherence to healthy prenatal behaviors. Results suggest that women with higher levels of MFA may be more likely to have an internal locus of control, which then leads to higher engagement in positive health behaviors during pregnancy.

A Review of Teenage Pregnancy Prevention Programs and Strategies

Kate McSpadden, BS; and Pamela A. Geller, PhD

Department of Psychology, College of Arts and Sciences, Drexel University, Philadelphia, Pennsylvania

Pregnancy among women aged 15 to 19 years has increased over the past 2 years. The United States has the highest teenage pregnancy rate compared with other developed countries. Approximately 750,000 teenage pregnancies occurred over the past year, 82% to 85% unplanned. Un-

planned teenage pregnancies have negative implications for the child that can last from infancy to adulthood. Teenage women are more likely to engage in unhealthy behaviors, such as alcohol and tobacco use while pregnant, which can result in low birth weight, preterm birth, and death in infancy. The consequences of teenage pregnancy not only are a health concern, but they can lead to psychosocial issues for these children; a majority grow up with limited financial, social, and educational resources. Few teenage mothers are married or have significant others with which to share this new responsibility. Unplanned pregnancies are the consequence of contraceptive nonuse or contraceptive failure. To reduce the incidence of unplanned teenage pregnancy, it is important to understand why 26% of sexually active teenagers do not use contraception during their first sexual experience, as well as the factors associated with contraceptive misuse. This poster provides a summary of past and current research efforts on effective pregnancy prevention programs and strategies. Suggestions and directions for future research on this topic are also provided.

Postpartum Depression in HIV-Positive and HIV-Negative Women: A Work in Progress

Erika Aaron, CRNP¹; Pamela A. Geller, PhD²; Alexa Bonacquisti, BS²; and Nancy Yip, BS³

¹Department of Obstetrics and Gynecology, Drexel University, College of Medicine, Philadelphia, Pennsylvania; ²Department of Psychology, College of Arts and Sciences, Drexel University, Philadelphia, Pennsylvania; and ³Division of Infectious

Diseases and HIV Medicine, Drexel University College of Medicine, Philadelphia, Pennsylvania

Background: HIV infection in women has been shown to be associated with an increase in symptoms of depression compared with women who are not infected. In addition, high rates of depression in HIV-positive pregnant women have been reported. However, little is known about the rates and predictors of postpartum depression in HIV-positive women. Research has indicated that 10% to 20% of pregnant women experience postpartum depression following delivery. This finding represents a significant health concern for both the mother and her infant, and may be even more pronounced when postpartum depression and HIV infection appear simultaneously. The current study seeks to examine predictors of postpartum depression among HIV-positive and HIV-negative women and hypothesizes that HIV-positive women will experience higher rates of postpartum depression in a matched cohort sample. **Methods:** Prenatal and postpartum data from ~30 women were collected. Rates of prenatal and postpartum depression were assessed using the Center for Epidemiological Studies Depression Scale and follow-up Structured Clinical Interview for DSM-IV-TR. Specific risk factors were also assessed to determine if they differ according to HIV status. **Discussion:** Results from this study will assist clinicians in predicting the risk of postpartum depression in HIV-positive pregnant women. This poster presents a work in progress and highlights preliminary findings of data collected at the Women's Care Center, a Drexel-affiliated OB/GYN clinic.