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Editorial

Cervical intraepithelial neoplasia in women infected with HIV

Introduction

Care for HIV infection in women has largely revolved around the prevention of mother to child transmission. With wider availability of antiretroviral drugs and lengthening life spans, we need to consider other health issues that affect these women. Cervical cancer remains a common cause of morbidity and mortality amongst women in the developing world. There is some synergism between the HIV and oncogenic HPV subtypes which has led to the recognition of the higher prevalence of cervical neoplasia precursors in women infected with HIV [1].

Screening

In addition to annual examinations, the American College of Obstetricians and Gynecologists still recommends annual screening with conventional Pap or thin prep tests for cervical cancer for women under 30 years of age. For those 30 years or older, screening options consist of annual cytology, less frequent screening (every 2-3 years) in those with 3 consecutive normal test results, and combined human papillomavirus (HPV) DNA testing and cervical cytology [2]. These guidelines, however, are for women in the general population. In examining the cumulative incidence of SIL according to baseline HPV DNA, HIV serostatus, and CD4+ cell count, the Women's Interagency HIV Study showed that the incidence of SIL in HIV -infected women with CD4+ cell counts below 500/μL was greater than that in women without HIV infection on multivariate analysis, with the rate in HIV -infected women with higher CD4+ cell counts being comparable to that in HIV-seronegative women [3].

For now, the existing recommendations regarding surveillance of lower genital tract neoplasia in HIV -infected women should generally be followed. These include inspection of the external anogenital area as part of an annual physical exam and taking of samples of all suspicious external lesions for biopsy. Two Pap tests taken 6 months apart should be obtained within the first year of HIV diagnosis. If the results of both are negative, tests can be repeated annually in those women with CD4+ cell counts greater than 500/μL. In those with lower counts and in those with abnormal findings Pap tests should be done every 6 months and combined with HPV testing. Colposcopy should be performed in all cases in which Pap tests reveal atypical squamous cells of undetermined significance (ASCUS) or worse.

These recommendations may be difficult to achieve in resource poor settings. In general, the uptake and availability of cervical cancer screening are suboptimal in developing countries. The need for screening is magnified manifold in women infected with HIV. Locally relevant protocols and feasible alternatives need to be developed for these women.

Treating Cervical Intraepithelial Neoplasia

Women infected with HIV and identified to have CIN need to be treated on a more holistic and more aggressive footing. Beside treating the cervical abnormality, general health measures such as smoking cessation and avoidance of hard drugs should be reinforced. Good nutrition, barrier contraceptive use and avoidance of unwanted pregnancy should be advised. This could be a good opportunity to screen and treat for other sexually transmitted infections. Though the evidence that they may be relevant to cervical intraepithelial neoplasia is tenuous, these measures should not be forgotten [4]. Women with HIV infection are in the younger age group. These women have a high risk of cervical adenocarcinoma [5]. In all women with squamous cell

abnormalities, endocervical cell assessment should be done.

CIN should be treated, with excisional techniques rather than destructive modalities. Loop electro surgical excision procedures (LEEP) offer the benefit of a "see and treat" approach in this situation. There is, of course, a small risk of over treatment with LEEP. This is balanced in women with HIV infection due to the high prevalence of abnormalities which are generally of a high grade. Highly active antiretroviral therapy has a beneficial impact on cervical intraepithelial neoplasia in terms of lower incidence and also inducing faster and longer lasting regression [6]. This could be an adjunctive mode of treatment in women with persistent CIN and in those with extensive lesions that are difficult to treat without extirpation. There is a high rate of recurrence of CIN after surgery in HIV -infected women. Surveillance should be instituted with immediate effect. Other abnormalities such as anorectal lesions should be looked for at such time.

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