

Genital tract abnormalities in HIV-TB co-infected women initiating antiretroviral therapy (ART)

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HIV infected women have an increased risk of acquiring genital tract infections and progression of pre-malignant cervical lesions. We describe the prevalence and incidence of genital tract abnormalities in TB-HIV co-infected women initiating ART. We conducted a retrospective study among 750 ambulant TB-HIV co-infected women initiating ART in Durban, between 2004 and 2011. All patients received sexual reproductive health services including a Papanicolaou (Pap) smear examination, and screening, diagnosis and management of sexually transmitted infections (STIs). Pap smear reporting included the Bethesda classification for endocervical abnormalities, and STI screening for human papilloma virus (HPV), trichomonas vaginalis, bacterial vaginosis (BV), herpes simplex virus (HSV) and candidiasis. Endocervical abnormalities were referred to a local hospital for further management. Baseline pap smears were obtained before or up to 6 months post-ART initiation in 750 women; mean (standard deviation (SD)) age 34.2 (8.0) years; mean CD4⁺ count 181.4 (SD 178.5) cells/mm³ and median log viral load 4.4 (IQR 2.6) copies/ml. Prevalence of genital tract abnormalities was 58.5% (439/750); comprising 18.0% (135/750) cervical lesions only, 11.7% (88/750) STIs only and 28.8% (216/750) both STIs and endocervical lesions. No abnormalities were detected in 19.9% of women (149/750), while results from 21.6% (162/750) were missing. STI prevalence was 40.5% (304/750); comprising HPV 20.0% (150/750), candidiasis 16.1% (121/750), BV 7.9% (59/750), *trichomonas vaginalis* 5.5% (41/750) and HSV 0.4% (3/750). Prevalence of endocervical abnormalities was 46.8% (351/750) comprising atypical squamous cells of unknown significance (ASCUS) 10.1% (76/750), cervical carcinoma (CACX) 0.5% (4/750) and high (HGSIL) and low (LGSIL) grade squamous intra-epithelial lesions of 12.1% (91/750) and 24.0% (180/750), respectively. The incidence of HPV in this cohort was 24.8 per 100 women years (95% CI: 15.7 to 37.2), candidiasis 7.4 per 100 women years (95% CI: 3.4 – 14.1), BV 10.5 per 100 women years (95% CI: 5.7 – 17.5), *trichomonas vaginalis* 1.5 per 100 women years (95% CI: 0.2 to 5.3) and HSV 1.4 per 100 women years (95% CI: 0.2 to 5.0). The incidence of ASCUS was 7.8, HGSIL 11.1, LSIL 25.9, and CACX 0 per 100 women years, respectively. HPV infections and LGSIL were the dominant genital tract abnormalities in TB-HIV co-infected patients accessing HAART.

Biography

Maynolia Naidoo has completed her MBChB at the Nelson R. Mandela School of Medicine in 2012. She is currently in her first year of internship at the Chris Hani Baragwanath Hospital. She was appointed as a CAPRISA research placement in her second year of medical school and is currently pursuing research as a CAPRISA fellow. She has a passionate interest in women's health and hopes to one day pursue a career in obstetrics and gynaecology.

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