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URINARY SYMPTOMS AND THEIR EFFECT ON QUALITY OF LIFE IN WOMEN LIVING WITH HIV: A CROSS-SECTIONAL STUDY

Hypothesis / aims of study

Lower urinary tract symptoms are common in women, although data specific to women with HIV is lacking. A survey in men demonstrated higher rate of urinary symptoms and quality of life impact in men living with HIV.(1) Our objectives were to determine prevalence and quality of life impact of urinary symptoms in women living with HIV, as well as to identify demographic characteristics associated with urinary symptoms in this population.

Study design, materials and methods

A cross-sectional urinary questionnaire was included in a multicenter national prospective interventional study of human papillomavirus (HPV) vaccination in HIV positive women. Demographic information was collected. Questionnaires included Urinary Distress Inventory (UDI-6) and Urinary Impact Questionnaire (UIQ-7). Descriptive statistics are presented as N (%), or median and interquartile range (IQR). Wilcoxon rank-sum, two sample chi-square or Fisher's exact tests were used as appropriate to compare women with UDI-6 score of at least 25 (cut-off correlates with care seeking)(2), to their counterparts on multiple demographic factors outlined in Table 1, as well as on a history of HIV-related conditions and AIDS-defining illnesses.

Results

To date, 82 out of 207 women in the HPV study, completed urinary questionnaires. Table 1 lists descriptive characteristics. Median age was 46 (39-50) and 72 (87.8%) were documented to be taking antiretrovirals. Mean CD4 count was 590 (440-759), and 57 (69.5%) were virologically suppressed. Forty-six women (56.1%) had previous sexually transmitted infections (STI) other than HIV [most commonly genital herpes (N=38, 46.3%), and chlamydia (N=18, 22.0%)], and 11 had a current STI. Median UDI-6 score was 8.3 (IQR: 0-25, range 0-75). The most commonly reported symptom was stress urinary incontinence in 33 women (40.2%), with 15 (18.2%) reporting moderate to severe bother from this symptom. Only 27 women (32.9%) had a UIQ-7 score greater than 0. Among those with UDI-6 score of at least 25, median UIQ-7 was 19 (0-48). When comparing baseline characteristics of women with UDI-6 score of at least 25 to those with less urinary symptoms, most demographic factors were not significantly associated, except menopausal status. Pre-menopausal women were significantly less likely to have a UDI-6 score of at least 25 than peri and post-menopausal women (OR 0.28, 95% CI 0.10-0.77).

Interpretation of results

Although many of the women living with HIV had urinary symptoms, quality of life was not significantly affected in most cases. Stress urinary incontinence was most commonly reported. Contrary to results of one study in men, where those with AIDS-defining illnesses were more likely to report bothersome lower urinary tract symptoms,(1) none of the severity factors of HIV (including CD4 count, unsuppressed viral load, HIV related conditions, and AIDS defining illnesses) were associated with urinary symptoms in our sample. However, this was a cohort of women who were generally well treated with good CD4 counts.

Concluding message

Urinary symptoms were common, but quality of life was not significantly affected in this sample of women living with HIV. Large comparative studies are needed to determine whether HIV is a risk factor for bothersome urinary symptoms in women.

Table

Table 1: Demographic characteristics			
Characteristics		UDI-6 ≥ 25 N = 23	UDI-6 < 25 N = 59
Age		49 (40-52)	45 (38-50)
Body Mass Index (10 missing values)		32 (24-34)	28 (22-34)
Race	- White	9 (39.1)	21 (35.6)
	- Black	10 (43.5)	27 (45.8)
	- Aboriginal	2 (8.7)	6 (10.2)
	- Other	2 (8.7)	5 (8.5)
Parity		3 (2-3)	2 (2-3)
Menopausal status (1 missing value)	- Pre-menopausal	9 (39.1)	41 (69.5)
	- Peri-menopausal	4 (17.4)	4 (6.8)
	- Post-menopausal	9 (39.1)	14 (23.7)
Time since HIV diagnosis (years)		17 (14-19)	14 (10-19)
CD4 count		660 (440-800)	569 (459-690)
Suppressed viral load		17 (73.9)	40 (67.8)

References

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