

Abstract

BACKGROUND:

It has been suggested that vaginal colonization with lactobacilli may reduce the risk of vulvovaginal candidiasis (VVC), but supporting data are limited. Our objective was to determine the relationship between vaginal bacterial flora and VVC.

METHODS:

We conducted a prospective cohort analysis that involved 151 Kenyan sex workers. At monthly follow-up visits, VVC was defined as the presence of yeast buds, pseudohyphae, or both on a wet preparation (including potassium hydroxide preparation) of vaginal secretions. Generalized estimating equations were used to identify correlates of VVC.

RESULTS:

Participants returned for a median of 12 visits (interquartile range, 11-12 visits). VVC was identified at 162 visits, including 26 involving symptomatic VVC. Bacterial vaginosis was associated with fewer episodes of VVC (adjusted odds ratio [aOR], 0.29 [95% confidence interval {CI}, 0.16-0.50]). After excluding women with concurrent bacterial vaginosis, another possible cause of vaginal symptoms, the likelihood of symptomatic VVC was higher among those who had had yeast identified on wet preparation of vaginal secretions during the past 60 days (aOR, 4.06 [95% CI, 1.12-14.74]) and those with concurrent vaginal *Lactobacillus* colonization (aOR, 3.75 [95% CI, 1.30-10.83]).

CONCLUSIONS:

Contrary to the commonly posited hypothesis that vaginal *Lactobacillus* colonization has a protective effect, we found that such colonization was associated with a nearly 4-fold increase in the likelihood of symptomatic VVC.