Agents associated with candida vulvovaginitis in women referred to health centers in Qazvin

MR Aghamirian, D keshavarz, H Jahani Hashemi, M sadeghi Qazvini

**Abstract**

**Background:** Genital tract infections are among the most common causes of patient referral to obstetric clinics and vulvovaginal candidiasis is a common complication of women. Nearly 75% of adult women suffer genital yeast infection at least once in their lifetime.

**Objective:** To determine the agents associated with candidal infection in patients referred to Qazvin public health centers in 2005.

**Methods:** This was an experimental study in which a total of 128 patients with abnormal vaginal discharge, genitalia pruritus, and disparonia were examined using vaginal swab sampling and direct microscopy of smears for candida followed by culture on Sabouraud dextrose agar. The data such as age, method of contraception, erythema of vulva, itching, burning, and white vaginal discharge were collected using a questionnaire. Statistical analysis was performed by means of χ² and Fisher exact test.

**Findings:** Our results indicated that 39 (30.5%) patients suffered candidal infection by direct smear method, however, 59 (46%) were positive by culture results. Among the vaginal symptoms, erythema of vulva, itching, burning and white vaginal discharge were shown to be significantly associated with vaginal candidiasis (p<0.05). Candida albicans was the leading (83%) agent among the yeast isolates followed by other species of Candida with lower frequency.

**Conclusion:** Diagnostically, the culture technique is more sensitive than direct smear for detection of vulvovaginal candidiasis.

**Keywords:** Vulvovaginal Candidiasis, Candida Albicans, Infections, Female Genitalia