

Diagnosis of a chronic vaginitis: Characterization of *Candida albicans* and in vitro antagonistic activities of vaginal Lactobacillus

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Abstract

Long-term use of antibiotics, in the treatment of vaginal infection can lead to *Candida* overgrowth. The motive of the present study was real case of a woman with chronic vaginitis. During ten years, the patient was subjected to a treatment with antibiotics such as gentamycin and lincomycin. Following remarks of a gynecologist, the complicated infection showed like yeast vaginitis symptoms. Consequently, we isolated the germ from a vaginal swab sample taken from the patient, and then it was identified phenotypically and belonged to *Candida albicans*. Our study was followed by examination of the effects of pH, temperature and growth media on the morphogenesis of the isolated *C. albicans*. The results showed that pH 7.4, temperature at 37 °C and glucose free medium were optimal conditions for filamentation. In order to study the antagonistic effect of vaginal lactobacilli against *C. albicans*, we used 23 Lactobacilli isolated from several healthy women. The results showed that all isolates had an inhibitory effect against *C. albicans* with a maximal zone of 25.67 ± 0.58 mm obtained by the isolate L17

Krywords: Antibiotics ; vaginal infection; *Candida albicans* ; Lactobacilli