Original Paper

Effect of *Thymus vulgaris*, *Myrtus communis* and nystatin on Candida albicans

Zia MA (PhD)*1, Bayat M (PhD)2, Khalkhali H (BSc)3, Saffari S (MSc)4

¹Assistant Professor, Department of Basic Science, Khorasgan Branch, Islamic Azad University, Isfahan, Iran. ²Assistant Professor, Department of Veterinary, Tehran Science and Research, Islamic Azad University, Tehran, Iran. ³BSc of Laboratory Science, Khorasgan Branch, Islamic Azad University, Isfahan, Iran. ⁴MSc of Microbiology, Falavarjan Branch, Islamic Azad University, Isfahan, Iran.

Abstract

Background and Objective: Candida albicans is the most frequent etiological agent of oral candidiasis. This study was done to compare the anticandidal effect of *Thymus vulgaris* and *Myrtus communis* to nystatin on Candida albicans.

Materials and Methods: In this laboratory study thirty-two strains of Candida albicans isolated from patients with oral candidiasis. Yeast suspension of Candida yeast cells was provided, subsquntly a serial dilution from *Thymus vulgaris* and *Myrtus communis* and Nystatin in Sabouraud Dextrose Agar (SDA) medium were prepared. Then a loop of Candida suspension was cultured on all of the solid media and was incubated at 25°C. The findings of fungus growing were recorded during 7 days.

Results: MIC of *Thymus vulgaris*, *Myrtus communis L*, mix of these essences and Nystatin was $0.390\mu l/ml$, $12.5 \mu l/ml$, $0.78 \mu l/ml$ and 160 IU/ml, respectively.

Conclusion: Thymus vulgaris contained antifungal activity against Candida albicans, but Myrtus communis demonstrated a very low activity against Candida albicans.

Keywords: Candida albicans, Nystatin, Thymus vulgaris, Myrtus communis L

Received 8 July 2012 Revised 10 November 2012 Accepted 6 December 2012

^{*} Corresponding Author: Zia MA (PhD), E-mail: zia.mohammadali@gmail.com