

ORIGINAL ARTICLE

THE TESTING OF IN VITRO KETOCONAZOLE SUSCEPTIBILITY ON THE CAUSATIVE AGENT OF GLABROUS SKIN DERMATOPHYTOSIS IN MAKASSAR

Triani Hastuti Hatta¹, Safruddin Amin², Farida Tabri,² Nasrum Massi³

¹ Histology Department, Medical Faculty, Hasanuddin University

² Dermato-venereology Department, Medical Faculty, Hasanuddin University

³ Microbiology Department, Medical Faculty, Hasanuddin University

Corresponding author:

Triani Hastuti Hatta

Medical Faculty

Hasanuddin University

Makassar

Phone : 081342696197

Email: triani_h2t@yahoo.com

ABSTRACT

Glabrous skin dermatophytosis is dermatophytosis that affects hairless skin areas which are divided into tinea corporis, tinea cruris and tinea facialis. Causative agents of dermatophytosis include: Trichophyton spp, Microsporum spp, and Epidermophyton spp genus. Ketoconazole is an antifungal drug that is widely administered because of its lower price than other drugs and have good clinical improvement, even though it's more toxic than the new antifungal, triazole. There was no research study about sensitivity/resistance ketoconazole for glabrous skin dermatophyte in Makassar. A cross sectional study was carried out in this study to test the sensitivity of ketoconazole for 45 dermatophyte colony isolates that grew up from scale of glabrous skin dermatophytosis patients of Wahidin Sudirohusodo General Hospital and its networks through the broth microdilution on Microbiology Laboratory Education Hospital UNHAS. The result of this study reveals that ketoconazole has become resistant of most of the causative agent of skin glabrous dermatophytosis in Makassar (88.88%). Microsporum audouinii rivalieri is the most variants found in glabrous dermatophytosis, followed by Trichophyton rubrum and Trichophyton mentagrophytes downy type. The genus of Epidermophyton was not found. Ketoconazole is more abundant to sensitive in Trichophyton spp than Microsporum spp. The match between in vitro antifungal sensitivity test and in vivo clinical improvement monitoring is required to determine the resistance of ketoconazole in a holistic manner.

Key words: *in vitro susceptibility testing, ketoconazole, glabrous skin dermatophyte.*