ABSTRACT

Background. Manifestations of opportunistic infections due to HIV / AIDS is oral candidiasis. Candida albicans is the main species most commonly found in people with HIV / AIDS. Recently there are many cases of Candida albicans’s resistance to the anti-fungal, so, we have to think about another alternatives to face this fact. Based on the recent study, it is found that the content of EGCG in green tea can increase the activity of anti-fungal and also restore its activity eventhough at the resistant C.albicans. Purpose. This study aims to determine whether there is a difference between the combination of green tea extract-ketoconazole with the single ketoconazole in inhibiting the colonization of resistant C.albicans in HIV / AIDS patients. Method. This research conducted in vitro by serial dilution method and calculation of the colony. This study used a sample of resistant’s C.albicans stock derived from HIV / AIDS patients and had received ARV therapy in RSUD Dr Soetomo Surabaya. This sample is recultured and then divided into 2 groups and given different treatments. Group 1 was given a single ketoconazole, whereas group 2 is given a combination of green tea extract-ketoconazole. In each group is performed serial dilution. In this serial dilution process, ketoconazole diluted with initial concentration of 20 ppm until the concentration is 0.15625 ppm, whereas green tea is given constant in each tube = 50%. After that, the colony were cross-checked and re-planted on SDA media. Result. From the calculation of the colony, there was a difference between the number of colony in group 1 and group 2. Conclusion. It can be concluded that administration of single ketoconazole is more effective than combination of green tea extract-ketoconazole. Therefore, not all anti-fungal can work synergistically with green tea.

Key words: Candida albicans, ketoconazole, green tea, HIV / AIDS