

**EFEK KOMBINASI EKSTRAK AIR TEH HIJAU – KETOCONAZOLE  
TERHADAP KOLONISASI *C. GLABRATA* DAN *C. TROPICALIS* PADA  
PENDERITA HIV / AIDS**

**(COMBINATION EFFECT OF GREEN TEA EXTRACT –  
KETOCONAZOLE TO *C. GLABRATA* & *C. TROPICALIS* COLONIZATION  
IN HIV / AIDS PATIENTS)**

**ABSTRACT**

**Background.** HIV / AIDS patients faced a state of immunocompromise condition because of their decreased immune response. It would be easier to facilitate the occurrence of opportunistic infections. The most often manifestation of opportunistic infections due to HIV / AIDS in oral cavity is oral candidiasis. *Candida non albicans* are commonly found and increase in people with HIV / AIDS. Treatment of oral candidiasis which usually given is anti-fungal, but recently, there are many cases of *C. glabrata* and *C. tropicalis*'s resistance to anti-fungal. Because of this condition, 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 against resistant of *C. glabrata* and *C. tropicalis*. **Purpose.** This study aims to determine whether there is a difference between giving a combination of green tea extract-ketoconazole with the provision of single ketoconazole inhibiting the colonization of resistant *C. glabrata* and *C. tropicalis* in HIV / AIDS patients. **Method.** This research conducted in vitro by serial dilution method and colony counting. This study used a sample of resistant's *C. glabrata* and *C. tropicalis* 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 up to 8x until the concentration is 0.15625 ppm, whereas green tea is given a constant in each tube by 50%. After the dilution carried out cross-checks and re-planting of each tube on SDA media. **Result.** Based on the colony counting, there was a difference between the number of colony in group 1 and group 2. **Conclusion.** It can be concluded that single ketoconazole is more effective than combination of green tea extract - ketoconazole. Therefore, not all anti-fungal could work synergistically with green tea.

**Keywords:** *C. glabrata*, *C. tropicalis*, ketoconazole, green tea, HIV / AIDS