TITLE: IN VITRO ANTIFUNGAL ACTIVITY OF CALCIUM HYDROXIDE PASTES COMBINED WITH ANTIFUNGAL MEDICINES AGAINST THE YEAST CANDIDA ALBICANS

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The frequency of invasive mycoses caused by opportunistic fungal pathogens has increased significantly in recent decades. One of the main etiological agents of opportunistic mycoses is the yeast *Candida albicans*. This yeast is present in the oral cavity and digestive tract of humans and other animals, in addition, causes various clinical infections called generically of candidiasis. It has several virulence factors important for production of disease. Its involvement with infections of periodontal and endodontic character is still very controversial in the literature. Some studies have shown that *C. albicans* colonizes root canals and dentin tubules with adherence through hyphae and blastoconidia. The spectrum of antimicrobial activity of the dressing of calcium hydroxide should include this yeast. Considering the importance of *C. albicans* in endodontic treatment failures, became feasible and timely conducting of research to determine the in vitro susceptibility of oral lineages and ATCC 10231 standard to different pastes of calcium hydroxide. The pastes for the tests were $CaOH_2$+ propylene glycol; $CaOH_2$+ chlorhexidine 2%; $CaOH_2$+ ketoconazole; $CaOH_2$+ fluconazole; $CaOH_2$+ clotrimazole; $CaOH_2$+ itraconazole. For this, five strains of c. albicans were collected from the oral cavity of patients seen at the clinic of Endodontics at the University of the Sacred Heart and analyzed. The efficiency of the pastes against the yeasts was performed by the method of dissemination of materials on Sabouraud dextrose agar plates and also by direct contact. For all groups adopted the non-parametric Kruskal Wallis test and Tukey post-test to indicate the differences between the groups. It was adopted a significance level of 5% for the analyses. *C. albicans* shows resistance against calcium hydroxide alone, but doesn`t show any resistance when utilized with antifungal medicines. That is important because we can decrease *C. albicans* in the infections without lose the efficiency of calcium hydroxide in mineralization of the bone. By the method of dissemination and direct contact, the antifungals ketoconazole, fluconazole, itraconazole and clotrimazole strengthened the action of calcium hydroxide.

Key words: calcium hydroxide, candida albicans, antifungal, yeast

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