The virulence profiles of *Candida albicans* daughter cells are unaffected by photodynamic therapy

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Phototherapies based on laser technologies have been introduced in medical and dentistry clinical applications around the world. It includes photodynamic therapy (PDT), which has been used to inactivate microorganisms, and a range of photosensitizers and light sources were reported in literature. Conversely, the impact of this therapy on metabolism of survival microbial cells is uncertain. The aim of this study was to evaluate the behavior of the photodynamic inactivation on yeast cells, as well as to investigate the effects of PDT on phospholipase production and germ tube formation in daughter cells from survival samples of PDT challenge. Suspensions of *Candida albicans* with 100μM methylene blue were irradiated with a diode laser emitting at λ=660nm. The time of irradiation was evaluated from 1 to 6 min., which resulted in fluences from 18 to 108J/cm². Suspensions of the survival cells from the PDT experiment were grown in Sabouraud agar plates and then, they were inoculated into specific medium to evaluate the phospholipase activity and the percentage of germ tube formation. PDT was efficient against the yeast cells (5.5 log reduction). After PDT, the daughter cells presented no difference on phospholipase production, as well as on germ tube formation when compared to the control group. Regardless an oxidative stress treatment, which inactivated a great amount of *C. albicans* cells; no difference on phospholipase production, as well as on germ tube formation could be observed following PDT on daughter cells.