# *Title:* Effect of ozonized olive oil on oral levels of *Candida* spp. in patients with denture stomatitis

# *Abstract*

*Objective:* The aim was to evaluate the effect of Ozonized oil (OZ) on oral candidal levels in denture stomatitis patients. Methods: In vitro tests were performed to validate antifungal activity and to standardize OZ conditions. Antifungal activity was screened against *C. albicans* and five non-*albicans* species. Also, the effects on *C. albicans* planktonic and biofilm were evaluated. After validation, OZ was included in a therapeutic protocol of denture stomatitis in vivo. Patients used OZ or sodium bicarbonate (SB) for 14 days. After 7 and 14 days, clinical evaluation, isolation and identification of yeasts were performed. OZ showed activity against all species of *Candida*. OZ reduced the number of viable cells in *C. albicans* biofilms. Oral candidal levels were lower in relation to baseline both after treatment with SB and OZ after 14 days of treatment. Results: A total of 493 *Candida* spp. isolates was obtained and 80% were identified as *C. albicans*. Remission of erythematous stomatitis lesions was observed in all patients after 7 days of treatment both groups. Conclusions: Within the limits of the study we can conclude that ozonized oil can be a new alternative for the control of biofilm in patients with denture stomatitis.

*Key-words:* Ozone; *Candida*; antifungal; stomatitis; denture.