

### **OC3: Yeast colonization of the oral cavity in an elderly population**

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**Introduction:** The oral cavity is a polymicrobial ecosystem with different complexity. Among the different fungal species, *Candida albicans* is the most frequent specie and is present in the normal oral flora of approximately 40-60 % of healthy subjects. The change of the oral cavity flora may promote the development of oral candidiasis.

**Objectives:** To characterize the mycological oral flora of an elderly community center users' and to study the influence of some factors in oral colonization.

**Materials and Methods:** Saliva samples were collected from 37 elderly and plated in *Sabouraud Dextrose Agar* (SDA). After growth colonies were picked for SDA and CHROMagar. Filamentation and chlamydo spores tests were carried out for *Candida albicans* species identification. Data on risk factors, such as dental prostheses, oral hygiene, smoking habits, diabetes, oral complication, were also collected through a questionnaire. For statistical analysis we conducted a uni and bivariate study and fisher test with  $\alpha=0.05$ .

**Results and Discussion:** Growth was obtained in 28 samples (76%), of these, 68 % were identified as *Candida albicans*, 25% *Candida non-albicans* and 7% of samples were positive for *Candida albicans* and *Candida non-albicans*. A relationship between growth and the use of dental prostheses ( $p = 0.042$ ) was found. We obtained 87.5% of yeast growth in prostheses users. The remaining variables showed no relationship with yeast growth. It should be noted that all samples with CFU count higher than 1000 belong to prosthesis users.

**Conclusion:** The results obtained are consistent with literature, particularly regarding the relationship between oral mucosa colonization and dental prosthesis use. Taking into consideration that higher CFU counts were found in prosthesis users and that is an elderly population, it is imperative to alert this age group for proper prosthesis cleaning.

### **References**

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