Bronchitis and COPD

Evaluation of genetic affinity between yeast-like fungi and *Klebsiella spp*. isolated from the biofilm of removable dental prostheses of patients in stabilized phases of chronic obstructive pulmonary disease

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Yeast-like fungi and gram-negative bacilli are the most frequent potential pathogens of the respiratory tract isolated from the denture plaque of patients with chronic obstructive pulmonary disease (COPD). Dominant species among yeast-like fungi are *Candida albicans* and *Candida tropicalis*. Significant frequency is also exhibited by *Klebsiella pneumoniae* and *Klebsiella oxytoca*. The purpose of this research is to analyze genetic affinity by means of RAPD technique for the strains of *C. albicans*, *C. tropicalis* and *Klebsiella spp.* present in patients in stable phases of COPD. The analysis of genetic affinity by RAPD method was conducted on clinical strains isolated from patients with COPD and patients in overall good health. 39 strains of *Candida albicans*, 12 of *Candida tropicalis*, as well as 9 strains of *K. pneumoniae* and 7 of *K. oxytoca* were subjected to scrutiny. The dominant species in clinical material from COPD patients was *Candida albicans* with a substantial degree of genetic profiles variations. On the basis of affinity analysis, 13 genetic types have been identified within this strain. An analysis of the banding patterns among *C. tropicalis* strains indicated the existence of 4 genetic types. Considerable diversity of genetic profiles among *Klebsiella spp.* has also been established. The genotype diversity of particular scrutinized strains of *Klebsiella spp*. may indicate the endogenic character of the majority of infections, regardless of the therapy applied for the underlying condition.