

## **The role of red bacterial complex in the periodontal conditions in drug addicted patients.**

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The drug addiction causes severe consequences in systemic and oral healthy. This study aimed to assess the oral health status in drug addicted patients and the effect of these drugs on the occurrence of bacterial members Socransky red complex in the mouth. Clinical oral examinations were performed in 108 drug addicted patients, as well as, in 100 patients without chemical subjection. The supra and subgingival biofilm, saliva and mucous membranes samples were collected in both group and subjected to detection of Socransky red complex periodontal pathogens by Polymerase Chain Reaction (PCR). The results reveled that *P. gingivalis* was associated with gingival bleeding, in the addicts group (Spearman,  $p < 0.01$ ) and control group (Spearman,  $p < 0.05$ ). *T. forsythia* was associated with bleeding gums and tooth mobility (Kendau and Spearman  $p < 0.05$ ) and periodontal sites with gingival bleeding (Spearman,  $p < 0.01$ ). Among patients dependents *T. denticola* proved no positive correlation in periodontal clinical variables. In the control group, *T. denticola* was positively related with mobility and gingival bleeding (Spearman,  $p < 0.05$ ). In both groups of patients, the main positive associations between members of the red complex occurred between *P. gingivalis* and *T. forsythia*, regardless of the origin of clinical specimens and conditions of periodontal patients (Spearman,  $p < 0.01$ ), followed by association of *P. gingivalis* and *T. denticola* and between *T. forsythia* and *T. denticola* (Spearman,  $p < 0.05$ ). It is found that the occurrence of members of the red complex in biofilm subjects with periodontitis is similar in both groups of patients, while its occurrence in healthy individuals or with gingivitis is significantly higher in the group of addicts (Mann-Whitney,  $p < 0.05$ ). It was concluded that drug addiction can come to be regarded as a facilitating factor for oral colonization by these periodontal pathogens.

**Keywords:** Drug addiction; *Porphyromonas gingivalis*; *Tannerella forsythia*.

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