

CONFERENCE ABSTRACT

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THE ROLE OF OXIDATIVE STRESS AND PERIODONTAL DISEASE IN SQUAMOUS CELL CARCINOMAS OF THE ORAL CAVITY – A REVIEW

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periodontal disease as a first stage towards the development of squamous cell carcinomas and to represent the essential foundation of more extensive future investigations.

OBJECTIVES AND BACKGROUND

This multidisciplinary and retrospective study of the Periodontal, Ear nose and throat, Oral-Maxillofacial and Biochemical literature aims, highlights and recalls the important role of the oxidative stress (OS) and periodontal disease in the development of squamous cell carcinomas of the oral cavity (OSCC).

MATERIALS AND METHODS

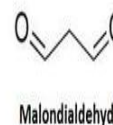
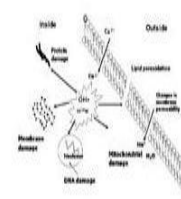
In the present study we analyzed a total number of 670 cases, collected from specialized scientific papers belonging to several authors of international level. These scientific papers are focused on highlighting the most common lipid peroxidation marker, Malondialdehyde (MDA), of both periodontal disease and squamous cell carcinoma of the oral cavity from serum or saliva samples that are biochemically collected and analyzed.

RESULTS

In all analyzed studies, we found that oxidative stress alters the composition of saliva. Also the depletion of antioxidants was remarked in the groups of subjects diagnosed with OSCC and those affected by periodontal disease. Scientific studies that investigated smokers, revealed the fact that these patients also show increased levels of reactive oxygen species. Thus, it is very likely that oxidative damage is intensified by smoking.

CONCLUSIONS

The purpose of this review was to emphasize the importance of oxidative stress in the development of



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