عنوان مقاله:

Salivary Total Antioxidant and Lipid Peroxidation Levels in Passive Smoking and Nonsmoking Adolescents

محل انتشار:

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نویسندگان:

Fatemeh Neshat – Oral and Dental Diseases Research Center, School of Dentistry, Zahedan University of Medical Sciences, Zahedan, Iran

Masoomeh Shirzaiy – Oral and Dental Diseases Research Center, School of Dentistry, Zahedan University of Medical Sciences, Zahedan, Iran

Sepideh Shademan – Dentist, Private Practice, Zahedan, Iran

خلاصه مقاله:

Background: Environmental tobacco smoke (ETS) is one of the most toxic environmental exposures andpassive smoking is an important general health problem. Children are the most vulnerable group to ETSexposure. This study aimed to compare the salivary total antioxidant capacity (TAC) and lipid peroxidationlevels in passive smoking and nonsmoking adolescents aged ۱۲-۱۵ years.Methods: This descriptive-analytical study was conducted on ۸۰ adolescents aged ۱۲-۱۵ years. The case group < br />included passive smokers and the control group comprised nonsmokers. These groups were age- andsex-matched ones. Unstimulated saliva of both groups was collected using the spitting method. Then, thesalivary total antioxidant and lipid peroxidation levels were measured using the ferric-reducing antioxidantpower (FRAP) and thiobarbituric acid reactive substances (TBARS) assays, respectively. The independentsamples t-test was used for data comparison.Findings: There was a significant difference in salivary total antioxidant levels between the case group < br />(۵۱.۹۸ ± ۸۸.۹۷ μM) and the control group (۱۷۴.۳۵ ± ۱۴۸.۱۵ μM) (P = ۰.۰۰۳). There was no significantdifference between the case group (۰.۹۷ ± ۱.۹۶) and the control group (۰.۸۱ ± ۰.۹۷) in lipid peroxidationlevels (P = ۰.۵۴۲).Conclusion: It seems that passive smoking can reduce the salivary TAC of adolescents, thereby threateningoral cavity health

کلمات کلیدی:

Tobacco Smoke Pollution, oxidative stress, Antioxidants, Saliva