

عنوان مقاله:

Effects of Diesel Combustion Nanoparticles on Oxidative Stress Markers among the Exposures

محل انتشار:

مجله سم شناسی پزشکی آسیا اقیانوسیه, دوره 7, شماره 1 (سال: 1397)

تعداد صفحات اصل مقاله: 6

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خلاصه مقاله:

Background: Although studies are available on lipid peroxidation products and the antioxidant status in experimental animals, a detailed report on human exposed to diesel combustion nanoparticles is meagre. We aimed to study the variation in oxidative stress markers among exposures. Method: A cross-sectional study during the period between 2015-2017 was conducted among 500 male garage workers of age group 25-40 years with history of exposure for 6-8 hrs a day without using any protective aids during work, for 6-12 years and 300 controls, who live in hilly areas where they were sparsely exposed. Serum oxidative stress markers were estimated and compared. Results: A significant variation was observed among the oxidative stress markers in exposures with surge in melanaldehyde (MDA) and reduction in superoxide dismutase (SOD) and catalase (CAT). Conclusion: Unprotected exposure to diesel combustion products induces oxidative stress which can alter recordable change among the markers. Oxidative stress, being the .route cause for cell damage, can be marked in the initial stages and is a good biomonitoring factor in primary care

کلمات کلیدی:

Diesel Combustion Nanoparticles, Lipid Peroxidation, Melanaldehyde, Oxidative Stress Markers, Superoxide Dismutase, Catalase

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