
P165. THE EFFECT OF QUITTING SMOKING ON OXIDATIVE STRESS PARAMETERS

Bicer CEMİLE, Yuksel SEVDA, Cucen ZUBEYDE, Sengezer TIJEN

Yıldırım Beyazıt University, Faculty of Medicine, Biochemistry Department
Turgut Özal University, Ankara School of Health Sciences, Child Development Department
Turgut Özal University, Ankara Vocational School of Health Services 4. Ankara Numune Training and Research Hospital, Family Medicine Clinic and Smoking Cessation Center

Deterious effects of smoking in smokers has consistently been observed when compared with healthy controls. Better evidence of quitting effects comes from within-subject changes. In our study we examined the changes in oxidative stress parameters; total antioxidant status (TAS), total oxidant status (TOS), total thiol (-SH), paraoxonase (PON-1) and arylesterase (ARE) in smokers before and after quitting.

50 smokers who applied to Ankara Numune Training and Research Hospital, Family Medicine Clinic and Smoking Cessation Center were participated in the study. 30 of smokers who succeeded in maintaining 3 months quitting were enrolled in the study. Blood TAS, TOS levels and PON, ARE activities were measured before and after quitting.

Serum TOS levels were significantly decreased ($p<0.001$) and ARE activities were significantly increased ($p=0.002$) after quitting. The changes in TAS, -SH levels and PON activity were statistically insignificant.

Quitting smoking has decreased oxidative stress and increased antioxidant capacity even after 3 months of quitting period.

* ckoca@ybu.edu.tr