

The Turkish Journal of Occupational / Environmental Medicine and Safety

Vol:2, No:1 (1), 2017

Web: http://www.turjoem.com

ISSN : 2149-4711

P78. THE EFFECT OF HYPERTENSION AND BODY MASS INDEX ON SISTER CHROMATID EXCHANGE IN MAINTENANCE HEMODIALYSIS PATIENTS WITH CHRONIC KIDNEY FAILURE

Sevcan MAMUR, Deniz YÜZBAŞIOĞLU, Fatma ÜNAL, Kadriye ALTOK, Serpil Müge DEĞER

Department of Biology, Polatlı Art and Science Faculty, Gazi University, Ankara, Turkey Genetic Toxicology Laboratory, Department of Biology, Science Faculty, Gazi University, Ankara, Turkey Department of Nephrology, Medical Faculty, Gazi University, Ankara, Turkey

Chronic kidney failure (CKF) disease is characterized by progressive loss of kidney function and associated with increased levels of genomic damage. Hypertension (HT) is a generally risk factor for progression of renal disease. In developed countries, increased body mass index (BMI) are associated with CKF. In this study, we investigated the possible role of HT on genetic damage in maintenance hemodialysis patients with chronic kidney failure by sister chromatid exchange (SCE) test. Effects of other factors, such as levels of BMI, age and sex were also evaluated. We examined 34 CKF patients undergoing hemodialysis. The results showed that there was no significant difference between the hypertensive (n=7) and non-hypertensive (n=27), those with body mass index (BMI) levels below (n=24) and above 25 (g/dL) (n=9), and between males (n=12) and females (n=22) in terms of sister chromatid exchanges (SCEs) and replication index (RI) in CKD patients. However, the age value below 50 (n=15) significantly increased the frequency of sister chromatid exchanges compared to the age value above 50 (n=19). These results suggest that hypertension and body mass index did not affect the frequency of SCE and RI in chronic kidney failure patients undergoing hemodialysis.

* smamur@gazi.edu.tr

TURJOEM, 2017, 210 78