The Turkish Journal of Occupational / Environmental Medicine and Safety

Vol:2, No:1 (1), 2017 Web: http://www.turjoem.com ISSN : 2149-4711

P79. DETERMINATION OF THE INFLUENCE OF HYPERTENSION, HEMOGLOBIN, AND FERRITIN LEVELS ON DNA DAMAGE BY COMET ASSAY IN HEMODIALYSIS PATIENTS

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Chronic kidney disease (CKD) is an important and growing health problem. Hypertension (HT) is a generally risk factor for progression of renal disease. In this study, we investigated to determine the possible role of HT on DNA damage by comet assay in maintenance hemodialysis patients with chronic kidney disease. Effects of other factors such as the levels of hemoglobin (HB), ferritin (FER), age, sex and duration of hemodialysis were also examined. No significant difference was found on DNA damage between the hypertensive (n=9) and non-hypertensive (n=44), those with hemoglobin levels below (n=40) and above 12 (g/dL) (n=13), those with ferritin levels below (n=36) and above 500 ng/ml (n=17), those with a duration of dialysis treatment below (n=34) and above 5 (n=19) years, those younger (n=20) and older (n=33) than 50, and between males (n=17) and females (n=36) in CKD patients. There was a negative correlation between the serum ferritin level and comet tail length (r=-0.310, p=0.024), however no correlation was observed in tail intensity. Moreover, there was no correlation between the DNA damage and the duration of hemodialysis treatment and age among CKD patients. As a result, age, sex, duration of hemodialysis treatment as well as HT, HB and FER values did not affect the primary DNA damage.

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