Frequency of Micronuclei and other Nuclear Anomalies in Epithelial Buccal Cells of Hairdressers

Kasum Rr. Letaj*, Isa R. Elezaj, Kemajl H. Kurteshi, Qerim I. Selimi

Biology Department, Mathematics and Naturals Sciences Faculty, University of Prishtina, Kosovo

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Abstract: Hairdressers are exposed daily to chemical substances, such as days, chemical straightens and curling chemicals, which can be absorbed, inhaled or possibly ingested. We analyzed the frequency of micronucleated cells (MNC), binucleated cells (BNC), broken eggs cells (BEC), karyolysed cells (KLC) and cells with karyorrhesis (KRC) in exfoliated cells of the buccal mucosa of 20 hairdressers (women) and 20 control subjects (women) of Prishtina city. The micronuclei frequency (MNC), BNC, BEC, and KRC of hairdressers was significantly higher (P<0.001; < 0.029; <.0.024; <0.021 respectively) in comparison with control subjects. A significant positive correlation was established between MNC and BNC, BEC and KRC (r=0.381, P<0.01; r= 0.490, P<0.001; r=-0.423, P<0.001 respectively).Our findings indicate that hairdressers are under risk of significant cytogenetic damage.

Keywords: exfoliated cells, buccal mucosa, micronuclei, binucleated cells, broken eggs

* Corresponding: E-Mail: kletaj2003@yahoo.com; Phone: ++ 381 38 249 872; Fax 0038138549782