



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

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Received April 30, 2012; Accepted June 26, 2012

Abstract: Hairdressers are exposed daily to chemical substances, such as dyes, chemical straighteners 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 karyorrhexis (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*

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