

P69. ASSESMENT OF *IN VITRO* GENOTOXIC ACTIVITIES OF SOME TRIMETHOPRIM SALTS

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Trimethoprim is a commonly used antibacterial substance which is used extensively in the treatment of various infections in humans. The purpose of this study is to determine the genotoxic activities of trimethoprim, trimethoprim+maleic acid, trimethoprim+oxalic acid dihydrate. Cytogenetic alterations in cultured peripheral blood lymphocytes such as micronuclei (MN) which originate from chromosomal fragments or chromosomes are biomarkers of genotoxic exposure and early effects of genotoxic carcinogens .So that reason, the genotoxic effects of these compounds were investigated after 24 and 48 hours treatment with cultured human lymphocytes with Cytokinesis Blocked Micronucleus (CBMN) assay. According to our results, trimethoprim and its salts have statistically increased micronucleus frequency dose and time dependent in human peripheral lymphocytes. From the results obtained, it appears that these drugs are able to induce genotoxic damage on human peripheral lymphocytes.