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Studies on the Genotoxic Effects of Anticancer Drug Carboplatin in *in vivo* Mouse

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ABSTRACT Genotoxicity of platinum antitumor agent carboplatin (Cbp) was investigated by using mouse *in vivo* test system. Three different doses of carboplatin viz., 30, 60 and 90 mg/kg b.w were used for the experiment. Fetal liver micronucleus (MN) test and sperm abnormality assay were used as the test parameters. Cyclophosphamide (50 and 100mg/kg b.w) was used as positive control and distilled water formed the negative control. Both the chemicals were administered intraperitoneally to experimental animals. MN and sperm preparations were made at 24 hr. and 35 days respectively. Carboplatin induced significant MN both in the fetal liver and the maternal bone marrow at different doses. It also induced high frequency of abnormal sperms at higher doses and the effect was significant at all the 3 doses tested.

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