2-BROMOPROPANE INDUCES MICRONUCLEI IN PARTIALLY HEPATECTOMIZED RAT LIVER BUT NOT IN BONE MARROW CELLS

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The mutagenicity of 2-bromopropane (2BP) was re-screened through the micronucleus assays both in hepatectomized rat liver cells, and bone marrow cells of rats and mice, which had shown no mutagenicity in the previous study using *in vitro* chromosome aberration analysis.

The mean frequencies of MNPCEs (micronuclei in polychromatic erythrocytes) in mouse bone marrow were 0.15 ± 0.10%, 0.19 ± 0.15%, 0.21 ± 0.12%, and 0.18 ± 0.12% at the concentrations of 200, 400, 800 and 1,600 mg/kg b.w. respectively. There was no increase in MNPCE frequency compared with the controls (0.14 ± 0.09%). And the mean frequencies of MNPCEs in rat bone marrow were 0.19 ± 0.41%, 0.18 ± 0.10%, and 0.21 ± 0.14% at the concentrations of 125, 250 and 500 mg/kg b.w. respectively. There was no increase in MNPCE frequency compared with the controls (0.15 ± 0.15%).

The mean frequencies of MNHs (micronucleated hepatocytes) induced by 2BP at the concentrations of 200, 400, 800 and 1,600 mg/kg b.w. were 0.53 ± 0.20%, 0.57 ± 0.14%, 0.53 ± 0.15%, and 0.58 ± 0.22%, respectively, while the control group shows the frequency of 0.22 ± 0.88% ; There were significant increases in micronucleus induction in the treatment groups compared with the controls ($p<0.05$).

From these results, 2BP induces micronuclei in partially hepatectomized rat liver but not in the bone marrow cells.

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