

THE USE OF DIETHYL-2-PHENYL-2-TELLUROPHENYL VINYLPHOSPHONATE IN THE ACETAMINOPHEN-INDUCED LIVER DAMAGE.

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The acetaminophen (APAP) is widely used as analgesic drug; however a high dose of APAP could causes depletion of cellular glutathione levels in liver, it is caused by N-acetyl-p-benzoquinoneimine, which consequently exacerbates oxidative stress. Diethyl-2-phenyl-2-tellurophenyl viylphosphonate (DPTV) is an organotellurium compound that possesses antioxidant properties. In this study, we aimed to investigate if DPTV could revert the liver damage caused by APAP. Adult male albino mice were divided into six groups (saline+oil, APAP 200mg/Kg+oil, APAP+DPDV at doses of 30,50, 100 and 200 mg/Kg). Saline and APAP were administered p.o., and oil and DPTV i.p. Thirty Animals received only one dose of APAP or saline, and 30 min after oil or DPTV were given, and were sacrificed 24hs later. Blood was collected, and the liver was removed and homogenized in Tris buffer for the determination of AST and ALT plasmatic activities, hepatic non-proteic SH and TBARS levels and d- ALA-D, SOD and catalase activities. APAP caused a significant increase in ALT activity and in TBARS, indicating that a hepatic damage was established. The low doses of DPTV alleviated the elevation of these parameters ($p<0.05$).The other evaluated parameters were not changed by APAP acute administration. These results suggest that this single dose of APAP cause damage to the liver and the DPTV achieved the reversion of the altered parameters.

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