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Protective Effect of Acyzol in a Model of Carbon Tetrachloride-Induced Hepatotoxicity

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Abstract

© 2016, Springer Science+Business Media New York.The present study investigates the hepatoprotective effect of a novel zinc-containing drug acyzol in comparison with silymarin, a medicinal extract of milk thistle (Silybum marianum). The hepatoprotective effect was studied in 40 albino nonlinear male rats in a model of toxic liver injury induced by intragastric administration of carbon tetrachloride. Both drugs were diluted in water and administered intragastrically at doses 10 mg/kg (acyzol) and 100 mg/kg (silymarin) for 10 days twice daily, after development of clinical toxic hepatitis. Biochemical and functional indicators of the liver parenchyma demonstrated that both drugs reduced mortality, normalized the body and relative liver weight, reduced intensity of cytolytic, cholestatic, and mesenchymal inflammatory syndromes, and restored liver function. The study demonstrates that acyzol and silymarin have comparable hepatoprotective effect, thus, providing a rationale for the use of acyzol in complex therapy of toxic hepatitis and hepatosis.

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Keywords

Acyzol, Carbon tetrachloride (CCl) 4, Hepatoprotectors, Hepatotoxicity, Rat liver hepatocytes, Silymarin, Zinc

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