

Activity of lysosomal enzymes in the liver and kidneys of mice after morphine administration

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Abstract :

Used were ninety Swiss mice males divided into 9 groups (n=10). Three control groups [I, II, III] were injected with 0.9% NaCl solution, while six experimental groups (A, B, C, D, E, F) with the morphine hydrochloride. Mice from groups A, C and E were injected with a dose of 20 and those from B, D and F with a dose of 30 mg morphine per kg body weight. In each group, both solutions were administered intramuscularly once a day from 9:00 to 10:00 a.m. for 4, 10 and 14 days. In the lysosomal fraction of the liver and kidney the activities of cathepsin D, cathepsin L, alanine aminopeptidase, leucine aminopeptidase, lysosomal lipase, and β -glucosidase were estimated. Morphine led to the increased activity of all examined enzymes except lysosomal lipase, the activity of which dropped in both organs examined.

Key Word :

kidney, liver, lysosomal hydrolases, mice, morphine

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