Histopathological studies on the effect of Curcumin during N-nitrosodiethylamine and Carbon tetrachloride induced hepatocarcinogenesis in rats.

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Abstract:

This experiment was performed to evaluate the protective effect of curcumin on N-nitrosodiethylamine (NDEA) and carbon tetrachloride induced hepatocarcinogenesis. Forty male rats were divided into four groups. In group A, fifteen rats were received a single i.p. injection of NDEA (200 mg/kg body weight). After one week, rats were received weekly s.c. injections of carbon tetrachloride (3 ml/kg body weight/week) for 6 weeks. In group B, fifteen rats were received diet containing 0.2% curcumin two weeks before the injection of NDEA and carbon tetrachloride and continued throughout the experimental period (20 weeks). In group D, five rats were received diet containing 0.2% curcumin for the whole period of the experiment. In group E, five rats served as control. Specimens from liver were taken for histopathological examination. The results of this experiment suggest that curcumin exerts a protective effect against N-nitrosodiethylamine and carbon tetrachloride induced hepatocarcinogenesis.

Keywords:

Curcumin, N-nitrosodiethylamine, carbon tetrachloride, hepatocarcinogenesis, histopathology.

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