ENHANCEMENT OF DIETHYLNITROSAMINE-INDUCED HEPATOCELLULAR NODULE DEVELOPMENT BY OPISTHORCHIS VIVERRINI IN SYRIAN GOLDEN HAMSTERS

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ABSTRACT

The influence of Opisthorchis viverrini liver fluke infection on development of diethylnitrosamine (DEN)-induced hepatocellular nodules was investigated in Syrian golden hamsters. Infection with 60 metacercariae, four weeks prior to administration of DEN for 12 weeks in the drinking water at dose levels of 10, 20 and 40 ppm, resulted in significantly increased yields of nodular lesions as compared to the group receiving carcinogen treatment alone. The results indicate an importande for parasite-associated liver injury and compensatory regeneration in hepatocarcinogenesis and suggest a possible role for Opisthorchis infestation in generation of hepatocellular tumors in man.