Título: Capillaria hepatica in rats: an exeptional model for testing anti-fibrogenic drugs

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Rats experimentally infected with Capillaria hepatica regularly develop septal fibrosis of the liver within 35-40 days. The regularity of development, the short period needed and the type of hepatic fibrosis, which arises in the absence of parenchyma necrosis and inflammation, turn this model an ideal one for anti-fibrogenic drug essays. Adult rats were infected with 1,000 embryonated eggs given by gavage. Treatment started either on day 25 (before fibrosis) or on day 45 (after fibrosis) and continued for one and two months thereafter. Interferon A, Pentoxifiline, Gadolin chloride and Vitamin A were the drugs used. Assessment of fibrosis was made in tissue taken after partial hepatectomy or after autopsy by means of morphometry in 5 µm sections or by biochemically measuring the concentration of hydroxiproline in fragments of the liver. Although the best preliminary results have been obtained with Pentoxifiline, complete data at the moment refer to Interferon A only. No evidence of anti-fibrogenic activity was detected with the administration of Interferon A. Initially, the animals were treated with the recommended dose of 100,000 IU. In other experiments this dosis was increased 5 and 8 times. But, in every case fibrosis developed both when the treatment started on day 25 or remained unchanged when the treatment started after day 45, when fibrosis was already well established. There are controversies whether Interferon A is an anti-fibrogenic agent. Data now obtained, considering the peculiarities of the C. hepatica rat model, are more adequate than those previously obtained from human patients or from other experimental models of liver fibrosis.