

generated liver cells exhibited a higher resistance to the toxic agent and displayed a type of cellular, metaplastic immunity of a parenchymatous organ. This conception finds a certain parallelism in the suggestion of Roessle, who noted that cirrhosis of the liver might represent an allergic phenomenon or possess an allergic component. Future investigations must show if reactions of this type play a role in the causation of hepatic neoplasia, elicited by these aromatic substances. Some of the hepatocarcinogenic dyes used produce frequently occupational or environmental allergic dermatoses. This aspect is of great practical importance, as numerous aniline dyes are employed for the coloring of foodstuffs (candies, pastry, fruit juices, fruit preserves, fresh fruits, butter, oleo-margarine, drugs, and cosmetics), and are ingested upon numerous occasions and by the population at large. In consideration of the experimental evidence attesting to the carcinogenic action of certain dyes and intermediaries, Maisin has demanded that the use of dyes for the above-mentioned purposes should be forbidden by law, unless it can be shown beyond doubt that the particular dye used is not carcinogenic.

There does not exist any relation between a susceptibility of certain strains of mice to the spontaneous development of hepatomas and those conferred upon them by a repeated and prolonged injection with aminoazotoluene (Andervont). This observation is of great interest and should be thoroughly checked, as it is in contrast to the effect which this and related chemicals exert upon the initiation and incidence of pulmonary tumors in mice.

Parasitic Infections

Parasitism of the liver plays an important role in the production of the cirrhosis of the liver, especially in oriental and tropical countries, where bacterial, protozoic, and helminthic infections affecting the liver, are prevalent. For this reason these disease conditions are of significance in regard to the genesis of primary hepatic malignancy.

Infections with malarial plasmodia, *Endamoeba histolytica*, and, to a lesser extent, with *Ascarides lumbricoides* are responsible for the high incidence of hepatic cirrhosis in Syria and Lebanon, particularly among their rural population (Yenikomshian). Cirrhosis of the liver, etiologically related to bacillary dysentery and malaria, is common among the inhabitants of South India (Menon and Annamalai). Reviewing a series of 54 cases of liver cirrhosis observed in North China, Wang found that syphilis and malaria figure prominently in etiological respects. The causal importance of helminthic infections in regard to the interrelated development of cirrhosis of the liver and primary carcinoma of this organ have been emphasized by Borrel; Lavier; Harant; Strong; and Leitch.

a) *Opisthorchis felineus*. *Opisthorchis felineus* is a trematode, which is introduced into man usually by the eating of raw fish, in the meat of which the immature worms are encysted. Its definitive hosts are the dog and cat,