CIRRHOSIS OF THE LIVER IN THE THREE ETHNIC GROUPS IN CAPE TOWN*

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Much of the scanty information on the frequency and types of cirrhosis of the liver in Africans is of restricted value in the absence of uniform grounds for its diagnosis and classification. Furthermore, the material is often selected, and mainly concerns the young Bantu male with primary carcinoma in addition to his cirrhosis. A project has been initiated by the African Cancer Committee of the International Union against Cancer to obtain comparable information on cirrhosis and primary cancer from different centres in Africa south of the Sahara, using the strict criteria and histological classification of Steiner and Higginson. This preliminary report is part of that project.

In the records of the Department of Pathology of the University of Cape Town, over the 10-year period 1948-1957, 121 cases of cirrhosis were found in 5,500 autopsies. This included a large number of infants, mainly Coloured and African, and the frequency figures are based on subjects over the age of 10 years (total 3,150). This autopsy material from the main teaching hospitals of the University of Cape Town, is representative of the 3 racial groups, except that no autopsies are carried out on the Moslem section of the Coloured community (Cape Malays).

Results

The incidence of cirrhosis in autopsies over the age of 10 was 5·2% in Europeans, 1·66% in Coloured and 6·4% in Africans. In all groups more males than females were examined at autopsy, and the corrected figures for the sexes are, males: Europeans 6·2%, Coloured 2·68%, and Africans 8·3%; and females: Europeans 3·8%, Coloured 0·66%, and Africans 2·3%. The figures for Africans are based on small numbers but are similar to those based on larger numbers from Johannesburg. The figures for Europeans are similar to those of other countries of European stock, with perhaps a rather higher figure for females. The incidence of cirrhosis in the Coloured is low in males and very low in females.

In all 3 groups the frequency of the histological types was very similar, with post-necrotic and portal types accounting for the majority. Types with fat were less frequent in the Coloured than in Europeans, and rarest in Africans. This relative uniformity of morphological types is not regarded as indicating uniform aetiological factors.

The age at death ranged from 55 in Europeans, 45 in Coloured to 37 in Africans. In the Europeans and Coloured the cirrhosis was in most cases the cause of death—the patients were admitted in coma or with ruptured oesophageal varices. In the Africans just over one-half died from an associated primary liver carcinoma; in most cases signs and symptoms were terminal only, and were probably due to the cancer. In the remainder the cirrhosis was usually an incidental finding at autopsy, where death was due to other causes. Associated primary cancer of the liver was found mainly in males, and in this series the frequency of primary cancer in cirrhosis in males was: Europeans 3·7%, Coloured 5·5% and Africans 57·9%.

Alcoholism was mentioned in the clinical notes in just over 50% of the Europeans and Coloured, but its true incidence is probably much higher, since a history was not obtained from some of the patients in coma. In Africans a history of having taken alcohol was elicited in only 9% of cases.

Conclusions

In European and Coloured in Cape Town the incidence of cirrhosis appears to be related to alcoholism. It is difficult to believe that dietary deficiencies unassociated with alcoholism play a significant aetiological role in these racial groups in Cape Town, since cirrhosis in European women is 6 times commoner at autopsy than in Coloured women.

In the African the connection between cirrhosis and alcoholism is much less striking. It is likely that some of the cirrhosis in the Africans in Cape Town has an aetiology similar to that in the European, since the type of alcohol that the European drinks is more readily available to Africans in this area than elsewhere in the Union. The bulk of cirrhosis in the African, here as elsewhere, differs from cirrhosis in the European in most respects except that of morphology. The most significant aspect of this difference is probably the relative infrequency of signs and symptoms of cirrhosis in the African except as a terminal phenomenon, when a primary cancer is so often present. It is suggested that in the majority of cases of cirrhosis in the African the cirrhosis and the cancer have a common aetiology, and that both diseases develop more or less simultaneously, presumably from ingested carcinogens of unknown nature.

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