STUDIES OF ANTIMONIAL ANTIBILHARZIAL COMPOUNDS
(EFFECT ON LIPID CONTENT AND METABOLISM)

BY

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INTRODUCTION.

I. GENERAL CONSIDERATIONS.

A chronic endemic disease, characterized by blood in the urine and by various bladder troubles has been known to exist in Egypt and probably elsewhere. The eggs of the parasite which causes the disease have been discovered in the renal cortex of a mummy dated 1250 A.C. A clinical account of what appears to be the disease has been mentioned in the Kahn papyrus of the XIIth Dynasty and 400 years later in the papyri of Ebers and Hunt and then in those of Berlin and London of the XVIIth Dynasty.

It was not until 1851 that Theodor Bilharz in Cairo found the causative agent of this disease in the mesenteric veins during a post mortem examination and he identified it as a fluke.

The life cycle of the worm was worked out by Loos and Leiper (1918) in Kasr-El-Ainy Hospital. The epidemiology and treatment were investigated by Khalil and Christopherson (1928) in the said Faculty. Finally the clinical aspect was studied by Madden, Day, Aly Ibrahim and Makkar (1936).

It is estimated that some 150 million human beings in the continents of Asia, Africa and Latin America suffer at

present from bilharziasis. Because of its wide distribution and the large number of people affected, bilharziasis has now been recognized as second only to malaria in importance as a parasitic disease.

In Egypt where the disease is hyperendemic, it is estimated that 18 million out of a total population of 26 million are affected. Accordingly the reduction in total economic productivity is estimated to be some 30% and the financial loss to be about 200 million pounds per annum (Khalil El Hadidy, 1964). The mortality rate directly or indirectly due to bilharziasis has been estimated to vary from 1 to 10% (A.H. Moussa, 1964).

Bilharziasis is increasing as new irrigation projects create a greater number of suitable habitats for vector snails. Increase in the cultivation of rice and cotton necessitates the establishment of new schemes of irrigation, but the deterioration of health and productivity following the development of perennial irrigation outweighed the increase in wealth from agricultural development (Ayad, 1955).

Three main species of schistosome parasites affect humans, these are the haematobium, the mansoni and the japonicum. Schistosoma japonicum is found in Japan and China, while Schistosoma mansoni prevails in Latin America, East and South Africa and in the Nile Delta of Egypt. Both types are characterized by the fact that the parasites after mating gather in