INTRODUCTION

i. HISTORICAL PERSPECTIVE

The Ancient Egyptians apparently knew the disease and recognised haematuria as one of its symptoms and called it "a aa - disease" and the cause was called "herrwt". They knew also antimony as a treatment for this disease (Riad 1962).

This disease was mentioned several times in four different papyri , 28 times in Ebers papyrus (Wilcocks, 1962) , 12 times in Berlin papyrus, 9 times in Heast papyrus and once in the London Medical Papyrus. Although these papyri were written about 1500 B.C. they were copied from other papyri dated at least as far as 3000 B.C. (Riad, 1962). Ruffer, in 1910 during historical studies of certain Egyptian mummies of xxth Dynasty (1250 - 1000 B.C.) discovered schistosome eggs in the kidneys of these mummies situated mainly in the straight tubules. This was the first published account of the identification of the parasites in Ancient Egyptians.

In the mid-nineteenth century (1851) Theoder Bilharz, was the first to discover the worm in mesenteric

veins of a patient at post mortem in Kasr El Aini Hospital. He was the first to draw the attention to the relation between the parasite which he described as Destoma haematobium and the disease (haematurici and dysentry).

In 1858, the parasite was named Schistosoma haematobium by Weinland (1858). In 1903, Manson suggested that more than one species of the worm were involved in the vesical and intestinal forms of the disease on grounds of dissimilar geographical distribution of both types of infestation.

Each male worm of the first group possesses 4 large testes while each worm of the second group has 7-9 small ones. He associated the multitesticular male worm with female giving lateral spined eggs and causing intestinal schistosomiasis, while the eggs of S. haematobiam worms that cause urinary schistosomiasis possess a terminal spine.

Allen in 1882 had recognized a relationship between the disease and bathing in canals, but the scientific investigation of the life cycle was first discovered in the work of a Danish naturatist Steenstrops (1845). He

recognized the importance of snails in the life cycle of various trematodes. Fujii(1847) described the disease schistosomiasis japonicum as katayma-ki and this was published in 1909 .

Katsurada (1904) after Bilharz, discovered S. japonicum.

Human schistosomiasis, or Bilharziasis, is a chronic helmenthic infection of approximately 200 million people in the orient, the middle east, Africa, the Carribean, and South America. It is caused by three species of worms, Schistosoma mansoni, S. hematobium, S. japonicum, Each species localizes in a different part of the vasculature and therefore, although the biology involved in each infection is similar, each results in somewhat varied clinical entity (Warren, 1972) and (**W.H.O expert committee** on Bilharsiasis 1965).

ii. BIOLOGY OF INFECTION

To understand the immunologic consequences which occur during schistosomiasis one should have a basic appreciation of the organism's life-cycle, especially that portion which occurs within the mammalian host (Colly 1974).