INCIDANCE OF TOXOPLASMOSIS IN CHRONIC ACTIVE HEPATITIS

THESIS

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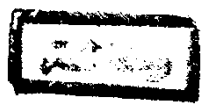

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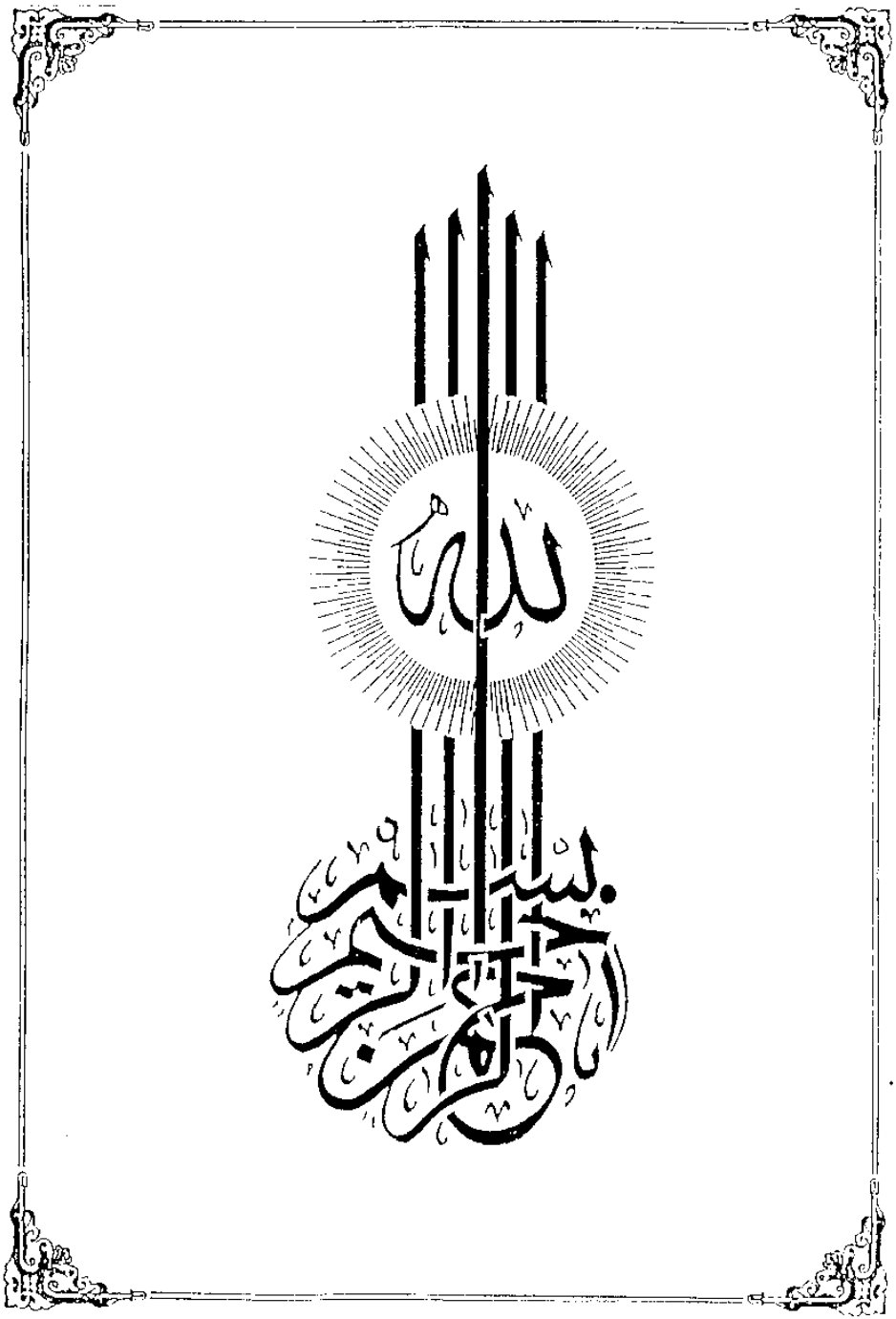
TO MY MOTHER AND FATHER



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AIM OF THE WORK

Toxoplasmosis is a common world wide disease which nearly affects over a quarter of the world's population (Christie , 1974) .

The causative organism , Toxoplasma gondii , is a coccidian parasite which is found in its asexual phase in most mamals and birds .

In the cat family , both domestic and wild , it has been shawn to exist in the sexual phase too (Hutchinson , 1978).

Toxoplasma infection , in humans , is asymptomatic in vast majority of cases . In immunocompetent host , lymphadenopathy involving one or more group is the commonset presentation . While , in immunocompromised host , toxoplasmosis is often fatal (Krick and Remington , 1978) .

Toxoplasmic hepatitis has been described as a clinical entity (Vischer et al., 1967) , Kobua et al. (1971) , Vethanyagan and Bryceson (1977) Bruchner (1978) , Weitberg et al. (1979) , Tiwari et al. (1982) .

The incidence and role of toxoplasmosis in chronic active hepatitis has not been heavily investigated , so it became the aim of this work to search for the incidance of toxoplasmosis in chronic active hepatitis and to find any relatation between the prevalance of toxoplasmosis and chronic active hepatitis .

REVIEW OF LITERATURE

T O X O P L A S M O S I S

HISTORY OF TOXOPLASMA

Darling (1908) reported illustrations of a biopsy taken from a patient from Barbados who was living in Panama , that fitted beautifully into the category which today would be called asymptomatic toxoplasmosis of the muscle .

Splendore (1908) described Toxoplasma as a cause of a fatal infection in rabbits in Brazil .

Nicolle and Manceaux (1908) drew attention to what appeared to be similar infection in the gondi , a rodent of North Africa .

Nicolle and Manceaux (1909) gave the name Toxoplasma gondii to that parasite which refered to its shape (Toxo= bow or arc) and gondii to the rodent from which it was originally isolated .

Janku (1923) reported a case of 18-month old child who died in prague with hydrocephalus , microophthalmus and a peculiar set of parasites in one eye , but he was unable to classify the parasite .

Torres (1927) described an intracelluler protozoon parasite in the brain and other organs of an infant who died at the age of 2 days and classified it as Encephalitozoon chagasi . That parasite was later , considered to be Toxoplasma .

Wolf and Cowen (1937) reported a case of congenital encephalitis in an infant and found Toxoplasma in sections of the nervous system .

Wolf , Cowen and Piage (1939) isolated the organism from the brain of a child who was suffering from encephalomyelitis .

Pinkerton and Weinman (1940) reported an infection with Toxoplasma in an adult peruvian but that case was complicated by a coexistent infection with Bartonella bacilliformis.

Pinkerton and Henderson (1941) reported infections with Toxoplasma in two adults with pneumonitis , encephalomyelitis and a rash. They considered it as a previously unrecognized disease entity simulating the typhus spotted fever group .

Since that time , many cases of toxoplasmosis were recognized and diagnosed in both infants and adults presenting with difterent clinical manifestations .

CLASSIFACTION OF TOXOPLASMA

Hutchison et al. (1970) mentioned that Toxoplasma oocysts were produced in the faeces of specific pathogen free domestic cats fed with tissue cysts containing Toxoplasma gondil. The oocysts were iso-spora like occysts i.e. disporocystic tetrasporozoic. On microscopical examination of the intestinal epithelium of infected cats, profuse schizogonic and gametogonic stages identical with those of the endogenous cycles of coccidian parasites were observed . The appearnce of those stages together with the nature of the-oocysts indicated that Toxoplasma , gondii could be a coccidian parasite closely related to the genus iso-spora .

PREVALENCE OF TOXOPLASMOSIS

(A) PREVALENCE OF TOXOPLASMIOSIS IN HUMANS

1. Prevalence of toxoplasmosis all over The world :

Altaman (1968) mentioned that toxoplasmosis is commen world-wide disease with greatest prevalence in the temperate and tropical zones .

Kean (1972) offered a figure of one-half billion human infections as a conservative estimate .

Chirstie (1974) mentioned that toxoplasmosis could affect over a quarter of the world population .

Remington (1974) stated that toxoplasmosis was a ubiquitous protozon infection with a world wide prevalence of 34% .

Brown (1976) mentioned that toxoplasmosis is cosmopolitan, and antibody surveys indicated that 20 to 80 persent of various population were infected . In areas where cats were numerous and their feces were spread around and under houses, the presence of antiboidies to Toxoplasma was relatively high in children , whereasin urban areas where meat was eaten raw or partially cooked the rate was high in adults .

2. Prevalence of toxoplasmosis in Egypt :

The first survey on toxoplasmosis in Egypt was carried out by Rifaat and Nagaty (1959) using skin test with an antigen supplied by lilli scientific laboratories. A positive reaction was found in 15.6% among hospital patients in Cairo.