

**TOXOPLASMA GONDII ANTIBODIES
IN SERA OF CHILDREN WITH
CHRONICALLY ENLARGED TONSILS**

Thesis

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INTRODUCTION

Introduction

Toxoplasma gondii has emerged in the minds of most physicians, veterinarians and research scientists, to be the aetiological agent of a variety of clinical diseases that were previously either thought to be caused by another agent or of unknown aetiology (Krahenbuhl and Remington, 1982).

The parasite was first discovered by Nicolle and Manceux at the Institute of Pasteur in Tunis, in the year 1908, in the African rodent Ctenodactylus gondii (Frenkel, 1949).

Toxoplasma gondii is an obligate intracellular parasite that has world wide distribution wherever cats are present acting as a definitive host, while man and many mammals and birds act as intermediate hosts (Frenkel, 1985).

This Parasite causes congenital or acquired infection in man, the acquired infection is usually subclinical or asymptomatic (Vietzke et al, 1968).

Childhood transmission starts at about one year of age and correlates with children playing on the ground in sand and soil, and with soil contamination with cat faeces, especially around the house (Stagno et al, 1980).

Adult transmission starts in late adolescence and increases gradually through adulthood, it correlates with eating undercooked meat, where this is a culturally acquired habit such as eating rare steaks. This can be termed carnivorous or tissue cyst transmission (Frenkel, 1985). Congenital infection occurs through transplacental transmission of infection to the foetus, this may result in abortion or central nervous or ocular lesions (Hultdt et al, 1979). Acquired Toxoplasmosis in immuno-competent children usually presents by a symptomatic lymphadenopathy.

The cervical lymph nodes are the most commonly affected, but any lymph node group may be affected (McCabe et al, 1987): Abnormal presentation of Toxoplasmic lymphadenitis are numerous, Macey et al, (1996) and Azaz et al, (1994) reported cases of submandibular lymphadenopathy, Akiner et al (1991) reported a case of intraglandular parotid lymphadenitis which responded only to toxoplasmosis treatment. Wishahy et al (1971). described a case of mediastinal lymphadenopathy, and the mesenteric or retroperitoneal lymph node involvement is also reported. (Luft and Remington, 1983).

Enlargement of the tonsils is a common presentation in childhood, the tonsils may be normally enlarged even reaching the midline of the throat (Arnold, 1992). Infection of the tonsils is caused by a variety of organisms whether bacterial mostly due to group A. beta haemolytic streptococci or viral mostly due to adenovirus (Ylikoski and Karjalainen, 1989).

In this study an attempt is made to evaluate the effect of toxoplasmosis on the tonsils using both serodiagnosis and histopathological examination of the tonsils.