



شبكة المعلومات الجامعية

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ





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شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم



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# جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

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# بعض الوثائق الأصلية تالفة



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بالرسالة صفحات

لم ترد بالأصل

**EVALUATION OF THE EFFECT OF REPEATED DOSES  
VERSUS A SINGLE DOSE OF PRAZIQUANTEL ON THE  
INCIDENCE OF HEPATITIS B AND C IN SCHISTOSOMA  
INFECTED SCHOOL CHILDREN IN SHARKIA  
GOVERNORATE**

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**DEDICATED**

TO

MY FATHER

LATE ELHAG MOHAMED KHALED MAKHLED

## GLOSSARY AND ABBREVIATIONS

ALT	Alanin aminotransferase
AST	Aspartate aminotransferase
BBMCS	Peripheral blood mononuclear cells.
CAH	Chronic active hepatitis
CIC	Circulating immune complexes
CH	Chronic hepatitis
CHB	Chronic hepatitis B
CHC	Chronic hepatitis C
CHD	Chronic hepatitis D
CLD	Chronic liver disease
C.O.P.T	Circumoval precipitation test
CPH	Chronic persistant hepatitis
CSA	Circulating S antibody
ELISA	Enzyme linked immunosorbant assay
HAV	Hepatitis A virus
HBV	Hepatitis B virus
HBIC	Hepatitis B immunoglobulin
HBsAg	Hepatitis B surface antigen
HBcAb	Hepatitis B core antibody
HCV	Hepatitis C virus
HCVAb	Hepatitis C virus antibody
HCD	Hepatitis D virus
HEV	Hepatitis E virus
HC/GRV-C	Hepatitis C/ Hepatitis G related virus
HPCE	High performance capillary electrophoresis
IHAT	Indirect haemoaglutination test
IFN	Interferon
IL-12	Interleukin-12
LCR	Ligase chain reaction
LCC	Liver cell carcinoma
MAb	Monoclonal antibody
NANB	Non A non B
OX	Oxamniquine
PCR	Polymerase chain reaction
PZ	Praziquantil
RASA	Radioallergosorbant assay
RIA	Radioimmunoassay
RIBA	Recombinant immunoblot assay
RT-PCR	Reversed transcriptase polymerase chain reaction
S	Schistosomiasis
Sm	Schistosoma mansoni
Sh	Schistosoma haematobum
SEA	Schistosoma egg antigen
WHO	World Health Organization

**REVIEW  
OF LITERATURE**

**INTRODUCTION  
AND AIM OF THE WORK**

## INTRODUCTION AND AIM OF THE WORK

Schistosomiasis, a grave and debilitating disease of socioeconomic importance, is increasing in incidence despite concentrated efforts to contain and control the disease in endemic areas (*Shekar, 1991*).

While multiprolonged methods of control using health education, sanitation and snail control have been resorted to, chemotherapy and chemoprophylaxis currently play the most crucial role.

A significant advance in the control of Schistosomiasis is the introduction of a relatively safe, effective broad spectrum oral anti-helminthic agent, praziquantel. Because the drug is effective even when treating advanced hepatosplenic schistosomiasis with few side effects, praziquantel is currently the drug of choice for the treatment of any kind of Schistosomiasis (*Shekar, 1991*).

The combination of schistosoma and hepatitis B virus infection has been found to cause severe hepatic lesion, more serious than either condition alone (*Bassily et al., 1983*). Furthermore transmission of HBV from HBsAg +ve mothers to their babies has been found to take place at a rate of 80% in mothers with Schistosoma as compared to a rate of 30% in mothers without schistosoma (*Abdel-Ghaffar et al., 1989*).

The hepatitis C virus has been increasingly recognized in patients with chronic liver disease. About 75% of cases of acute hepatitis in

children in a rural area of Egypt were attributed to NANB hepatitis compared to only 18% in an urban area (*Abdel-Ghaffar et al., 1993*).

**Aim of the work:**

To evaluate the effect of repeated praziquantel administration on the reinfestation & morbidity of schistomiasis in school children in an endemic area in Egypt, the incidence of hepatitis B and the incidence of hepatitis C.

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# SCHISTOSMIASIS

## INTRODUCTION

### History:

The break through in the study of schistomiasis (S) came in 1851 at the Kasr El-Aini Hospital in Cairo. A young German pathologist Theodor Bilharz found (S) in the urinary bladder, described the pathological changes in the organ, ascribed them to the parasite eggs, and made clinical associations with haematuria. He also observed schistosome eggs in the intestine and associated them with dysentery. He gave his name to Bilharzia, another word for the schistosome parasite and to Bilharziasis (*Frohberg et al., 1981*).

About 200 million people are infected with (S). Those who get heavy infections especially children are in danger of severe disability or death. Meanwhile, (S) represents a constant exposure to as many as 600 million as they perform daily activities related to water-swimming, fishing, forming, washing and bathing (*Hanjong Rim et al., 1985*).

### Geographical Notes:

There are five species of (S) responsible for disease in man. The three most important ones are schistosoma mansoni (Sm), schistosoma haematobium (Sh) and schistosoma Japonicum (Sj). Intestinal S caused by (Sm) occurs in 53 countries in Africa, the Eastern Mediterranean region, and the Carribbean and South America. Urinary (S) due to (Sh) is endemic in 52 Eastern Mediterranean and African countries. In 40 countries both (Sm) and (Sh) are reported to be endemic. Intestinal (S) caused by (Sj) or oriental (S), used to be endemic in six countries in south East Asia and the Western Pacific region, but it is found today only in