

## INTRODUCTION

Hepatitis was recognized as a serious public health problem very long ago. Liver disease and jaundice were well known to the Babylonians and other people of antiquity. Both the Babylonians Talmud (5th century B.C.) and the writings of Hippocrates alluded to jaundice as a disease symptom complex (Fields et al, 1985).

The term "hepatitis" means inflammation of the liver. Hepatitis may be caused by viruses, bacteria, drugs, toxins, or excess alcohol intake. Several viruses are known to cause hepatitis; the most common ones are the hepatitis viruses; other viruses such as cytomegalovirus (CMV) and Epstein Barr virus (EBV) may cause hepatitis; as well as other unidentified viruses presumed to be associated with hepatitis have not yet been identified. Regardless of the cause, the signs and symptoms of viral hepatitis are similar although not identical.

Viral hepatitis is a general term reserved for infections of the liver caused by one or more of at least five distinct hepatitis agents. Most cases of acute viral hepatitis in children and adults are caused by one of the following agents: hepatitis A virus (HAV), the etiologic agent of viral hepatitis type A (infectious hepatitis or short incubation hepatitis), hepatitis B virus (HBV) which is associated with viral hepatitis type B (serum hepatitis or long incubation hepatitis), and the more recently recognized hepatitis C,D,E, etc viruses. Because these viruses are associated with hepatitis that cannot be ascribed to either HAV or HBV, the disease was designated non A non B hepatitis. The most notable sign of this disease is jaundice, a yellow discoloration of the skin and conjunctivae caused by the deposition of bile pigments that a damaged liver fails to remove from the blood.

Hepatitis A virus is transmitted primarily by the fecal-oral route. Hepatitis B virus produces sporadic infections principally

after parenteral inoculation of virus laden blood or blood products. Also, transmission may occur by a non percutaneous route (Jawetz et al, 1983).

While HBV is transmitted primarily by the parenteral route, other routes have been investigated. The possibility of transmission by mosquitoes and other blood sucking insects has been investigated as well as transmission by a number of body fluids including blood, urine, saliva, colostrum, milk, bile and feces. However, data in support such mechanisms are lacking (Alamy et al, 1979).

In Egypt, hepatitis is considered to be endemic. At maturity 96 % of the population have IgG-HAV antibody (Zakaria et al, 1988b).

A study conducted in Egypt indicated that the prevalence of HBV in preparatory and secondary schools pupils averaged was 22.5 % (4.1 % HBs antigen and 18.4 % HB antibodies). Infection rate (carrier and antibody positive i.e. previous exposure) for preparatory schools was 26 % compared to 12.5 % for secondary schools.

The prevalence of HBV antigen averaged 4% in both preparatory and secondary levels, 22% of preparatory and 8.5% of secondary school pupils were positive for HB antibody. Therefore, the chances of exposure and infection is higher among preparatory school pupils (Imam, 1977).

In another study on HBV among Egyptian infants and children with affected livers the maximum prevalence of HBs antigen was 13.4% in the age group 2-5, whereas the prevalence of HB antibody increased to 40 % in adults (Imam, 1982).

Viral hepatitis is a global disease of major significance, both in the incidence of mortality and morbidity and in the enormous demands that it places on economic and medical resources. Acute viral hepatitis sometimes can be diagnosed on the basis of clinical features and history that suggest a particular causative agent. In most cases, however, specific laboratory tests must be used to establish a diagnosis.

#### **Aim of the Work**

To determine the viral etiology of acute hepatitis cases among children, 0-10 years of age who presented to the Ministry of Health Abbassia Fever Hospital.