

INTRODUCTION

AND

AIM OF ASSAY

Introduction

- Hepatobiliary parasites constitute an important etiological factor in abdominal surgery. The lack of resources and the late presentation of many patients constitute the major challenges to the delivery of surgical services in the tropics and in the developing world in which such parasitic infestations are common (**Watters 2000**).

- Parasites that affect the hepatobiliary system are divided into:

Four Common Parasites: 1- Entamoeba histolytica.

2- Echinococcus granulosus – E.multilocularis.

3- Fasciola (Liver Fluke).

4- Ascaris Lumbricoides (**Suchy 1994**).

Other less common organisms:

1- Leishmania donovani (visceral leishmaniasis) causing hepatosplenomegaly.

2- Visceral larva migrans causing hepatosplenomegaly.

3- Liver flukes other than fasciola : chlonorchis sinensis, opisthorchis viverrini and felineus.

They cause jaundice, cholangitis, cholangiocarcinoma and pancreatitis (**Suchy 1994**).

- Amoebic infestation caused by E. histolytica may present with an amoebic liver abscess if the trophozoites reach the liver through the portal circulation. Early symptoms may be local discomfort and malaise, later a swinging temperature, enlarged tender liver cough and pain in the right shoulder are characteristic. (**Grewal 1984**).

- Hydatid disease is caused by *E. granulosus* and the alveolar form, *E. multilocularis*. Ova enter the portal system when ingested and from there may lodge anywhere in the body, most commonly the liver (70%). A hydatid cyst may remain symptomless for years, until it enlarges and presents as a painful, palpable swelling in the upper abdomen . It forms part of the differential diagnosis of abdominal mass in patients who live in or come from endemic areas **(Macleod et al, 1987)**.

- Of the four liver flukes (trematodes) present in the tropics, *fasciola hepatica* is the one much more widespread. The young flukes traverse the duodenal wall and liver parenchyma before maturing in the bile ducts. Occasionally the patient may suffer from subcapsular hematomas of the liver or even intrabdominal hemorrhage. Biliary dilatation, obstruction, cholangitis and jaundice are common. **(Suchy 1994)**.

- *Ascaris* worms may occasionally stay into the biliary ducts and cause biliary pain. Complications include strictures, suppurative cholangitis, liver abscesses and empyema of the gall bladder **(Grewal 1984)**.

- Investigations of parasitic infestation of the hepatobiliary system vary according to the nature of the disease. Care should be taken in all patients to varify the nature of the hepatobiliary parasite by:
 - a. Careful and detailed history taking
 - b. Serological tests
 - c. Imaging techniques and gross appearance at the time of operation