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Liver cirrhosis and splenomegaly associated with *Schistosoma mansoni* in a Sudanese woman in Malaysia: A case report

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ABSTRACT

We report a case of a patient with *Schistosoma mansoni* infection who presented with liver cirrhosis and splenomegaly. She was diagnosed by a serological test and Kato-Katz thick smear stool examination. The patient was a 52-year-old woman from Sudan who came to Malaysia for a week to visit her sons. The patient lives in the middle of Rabak region, Sudan, a highly endemic area for schistosomiasis where her daily routine includes rearing of cows and farming. The site of toilet and sources of drinking water are canals and wells; both infested with snails. Patient had a long history of exposure and coming into contact with water from these canals and wells.

1. Introduction

Schistosomiasis is an infection caused by blood flukes and remains an important health problem in many countries. It is endemic in tropical and subtropical countries mainly in Africa and the eastern Mediterranean region. Its incidence is rising in non-endemic countries due to immigrant populations and tourists[1]. The main disease-causing species are *Schistosoma haematobium* (*S. haematobium*), *Schistosoma mansoni* (*S. mansoni*), *Schistosoma japonicum* (*S. japonicum*), *Schistosoma mekongi* and *Schistosoma intercalatum*[2]. Schistosomiasis is a public health risk to those travelling to endemic areas within Asia and Africa who may be accidentally exposed to infection through contact with infective cercarial stage in rivers, lakes or canals[3]. In the case of *S. mansoni*

infection, the eggs are released in the faeces of infected individuals. The transmission cycle requires contamination of surface water by the excreta and presence of specific fresh water snails as intermediate host[4]. When the eggs come in contact with water, they hatch and miracidia are released. Miracidium penetrates freshwater snail of the genus *Biomphalaria* where it develops through various stages to become infective cercariae. The cercariae which are the larval form of the parasite then emerge from the snails mainly on exposure to light into the water[5]. Infection is usually acquired by humans through activities such as swimming, bathing, fishing, farming and washing clothes following skin penetration by the cercariae. The cercaria sheds its tail during skin penetration and the parasite is transformed into a schistosomula. Schistosomulae then develop to adults in the veins of liver and paired adult worms migrate from liver to the inferior mesenteric veins in the sigmoidorectal area where the female worm lays eggs. Eggs penetrate the gut wall to reach the colonic lumen and are passed in stool.

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