AN ASSESSMENT OF RE-INFECTION RATES AND TREATMENT OUTCOMES OF PATIENTS WITH PULMONARY PARAGONIMIASIS

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Abstract

Pulmonary paragonimiasis or lung fluke infection is a food-borne parasitosis that is acquired by ingestion of raw or insufficiently cooked fresh water crabs. If left undiagnosed and untreated, this can lead to a severe and disabling disease that reduces human productivity and quality of life. The presence of an Integrated Tuberculosis-Paragonimiasis Surveillance Program in the municipalities of Casiguran and Irosin in Sorsogon may not be enough in trying to control this public health problem. Data on finer points such as re-infection rates are still lacking. This information is especially relevant considering that people living in endemic areas may not necessarily alter their food preferences and eating habits easily even with a proven bout with lung fluke infection. In addition, there are no local studies about the extent of clinical and parasitological responses to praziquantel therapy, amidst reports of non-response to treatment. A follow-up survey was conducted in the municipalities of Irosin and Casiguran which gave special attention to these issues. Results showed that overall infection rate did not significantly differ from previous levels found in surveys done in 1997-1998. Also, in patients with past history of paragonimiasis, 11.5% were again found positive for lung fluke ova. Non-clearance for parasite eggs even after treatment was also seen in some patients. Our survey gathered valuable data that may help justify the need for follow-up and for better health education and promotion strategies that will prevent subsequent exposure and eventual disease, and probably, in the evaluation of existing treatment guidelines.

Keywords: Paragonimiasis, lung fluke infection, food-borne parasitosis, *Paragonimus westermani*, epidemiology, re-infection rates

Introduction

Pulmonary paragonimiasis or lung fluke infection is a food-borne parasitosis that is acquired by ingestion of raw or insufficiently cooked fresh water crabs and/or crayfishes. The types and severity of clinical manifestations may vary, oftentimes, presenting signs and symptoms similar to those of pulmonary tuberculosis (TB), which is one of the most important public health problems in the Philippines. If left undiagnosed and untreated, paragonimiasis can lead to a severe and disabling disease that reduces human productivity and quality of life. The public health and economic impacts of this disease are considerable in terms of morbidity, loss of productivity, and absenteeism, health care costs, and agricultural losses (WHO, 1995).

Data on re-infection with lung flukes remain lacking. This in the background of reports of recurrence of signs and symptoms and demonstration of lung fluke eggs on sputum examination in patients previously diagnosed to have and have been treated as pulmonary paragonimiasis and who were known to have clinically improved. This issue of possible re-infection is especially relevant considering that people living in endemic areas may not necessarily alter their food preferences and eating habits easily even with a proven bout with lung fluke infection. This valuable information may help justify the need for follow-up and for better health education and promotion strategies that will prevent subsequent exposure and eventual disease.

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