

# A Summary On Respiratory Symptoms In Thai Cases With Pulmonary Paragonimiasis

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## Abstract

Paragonimiasis is an important helminthic disease. Man is infected accidentally. Paragonimiasis has a worldwide distribution but is mainly encountered in Southeast Asia. This study was designed as a descriptive retrospective study. A literature review of the papers concerning pulmonary paragonimiasis in Thailand was performed, using the database of published works. According to this study, there have been at least 10 reports in the literature of 68 cases of pulmonary paragonimiasis in the Thai population. Concerning the respiratory symptoms detected in this study, hemoptysis (frequently rusty-colored) is common. Another common respiratory symptom is chest pain. These symptoms are usually accompanied with infiltrative chest X ray and can mimics those of tuberculosis.

## INTRODUCTION

Paragonimiasis is an important helminthic disease [1,2]. Man is infected accidentally [1]. Paragonimiasis has a worldwide distribution but is mainly encountered in Southeast Asia. Pulmonary paragonimiasis is the most common manifestation of this disease [1, 2]. The clinical symptoms are often cause for an erroneous diagnosis of tuberculosis in many patients with paragonimiasis [3]. Presently, pulmonary paragonimiasis is considered as an important tropical lung infection [4]. In Thailand, first cases of pulmonary paragonimiasis was reported by Prommas in 1928 [5]. Since the first case report, there have been sporadic case reports of pulmonary paragonimiasis in Thailand. Here, the author performed a literature review of the reports of pulmonary paragonimiasis in Thailand in order to summarize the characteristics of this infection among Thai patients.

## MATERIALS AND METHODS

This study was designed as a descriptive retrospective study. A literature review of the papers concerning pulmonary paragonimiasis in Thailand was performed, using the database of published works cited in the Index Medicus and Science Citation Index. The author also reviewed the published works in all 256 local Thai journals, which are not included in the international citation index. The literature review focused on the years 1928 - 2004.

According to the literature review, reports were recruited for

further study. The details of respiratory symptoms of the patients in all included reports were studied. Descriptive statistics, including range and percentage, were used in analyzing the patient characteristics and laboratory parameters for each group. All the statistical analyses in this study were made using SPSS 7.0 for Windows.

## RESULTS

According to this study, there have been at least 10 reports in the literature of 68 cases of pulmonary paragonimiasis in the Thai population. Of these 68 cases, 44 were males, 18 were females and not mentioned for sex in 6 cases. Of the 60 cases that documented age, the ages ranged from 10 years to 68 years. No lethal case was reported. The summary of the respiratory symptoms among these cases are presented in Table 1.

### Figure 1

Table 1: Respiratory symptoms in Thai cases with pulmonary paragonimiasis.

Symptoms	Number (%)**
Productive cough with bloody sputum	53 (77.9)
Non productive cough	1 (1.5)
Chest pain	46 (67.6)
Asymptom*	14 (20.6)

\* Accidentally found by stool examination  
\*\* Some cases have more than one symptoms

## DISCUSSION

Paragonimiasis is a parasitic disease of carnivorous animals caused by trematodes of the genus *Paragonimus* [1,2,3]. The

etiology is a flat worm called “lung fluke” which usually infects the lower respiratory tract [1,2,3]. Cerebral infection is uncommon and in Thailand there has been no reported case of cerebral paragonimiasis. Here, the author summarized previous case reports of pulmonary paragonimiasis in Thailand. The respiratory symptoms in those cases were collected and analyzed. Of all cases, the diagnoses were established finally on the basis of the clinical history, positive skin test and characteristic radiological finding in the chest, as well as the demonstration of *Paragonimus* ova in the stool or sputum. Concerning the respiratory symptoms detected in this study, hemoptysis (frequently rusty-colored) is common. Another common respiratory symptom is chest pain. These symptoms are usually accompanied with infiltrative chest X ray and can mimics those of tuberculosis.

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