Imaging suggestive of Pentosomiasis of lung in the forest region of Guinea in West Africa

Bafende Aombe Eric., Guilavogui Agathe., Kolie Cece.
The Medical Centre of Mission Philafricaine at Macenta, in Guinea (West Africa)

**ARTICLE INFO**

**Article history:**
Received 22 September 2012
Received in revised form 27 September 2012
Accepted 19 October 2012
Available online 26 December 2012

**Keywords:**
Pentosomiasis
Guinea
West Africa

**ABSTRACT**

The authors are reporting the first case of Human pentastomiasis in the forest region of Guinea in West Africa. The 52 years old man Guinean farmer has a history of eating snakes. The authors recommend to cook well snake before consumption and a moderation on the snake consumption.

1. Introduction

Pentastomiasis is a zoonotic infection due to pentastomose, an unusual group of vermiform parasites which inhabits the respiratory tracts of snakes and reptiles. Wyman was the first to identify the parasite in the nasopharynx of the African Python in 1848 [1]. Human pentastomiasis was first reported by Pruner in Cairo in 1847 [1]. It is prevalent in West and central Africa [2] and Asia [3]. There is no published cases on Human pentosomiasis in Guinea in West Africa although populations who live in the forest region eat snakes regularly. The authors are reporting the first case of Human pentastomiasis suggested by the radiological finding.

2. Case report

The authors report a case of human pentastomiasis in a 52 years old Guinean farmer in the forest region of Guinea in West Africa. The patient came on October 4th 2011 at the medical Centre of Mission Philafricaine, located at Macenta in the forest region of Guinea in West Africa at 800km south–west of Conakry.

*Corresponding author: Dr Eric Bafende Centre Médical de la Mission Philafricaine de Macenta BP 214 Conakry 1 République de Guinée West Africa
E-mail: eric.bafende@sam-ame.org*
The patient complained of cough with sputum without fever during 5 weeks. He has a story of consumption of snake meat for decade. Physical examination and extensive laboratory tests failed to reveal any significant abnormalities. The diagnosis was made incidentally by the imaging shown on the chest x ray of the patient with the characteristics calcification of the lung (Figure 1). The x ray of chest performed on October 6th 2011 showed multiple calcifications in the lung highly suggestive of the calcified dead larvae of Armillifer Armillatus.

3. Discussion

The consumption of undercooked contaminated snake meat likely plays a major role in transmission of pentastomes ova to human. In West Africa it has also been associated with groups who use the snake as a totem [4]. There are more than 70 species of pentastomes but only 2 species can be recognized radiologically :Armillifer Armillatus in Africa and Armillifer Moniliformis in South Asia. Humans are only ever an accidental intermediate host for Armillifer, i.e. the larvae establish themselves in the visceral organs causing human visceral pentastomiasis, but adults do not occur in the human respiratory system. After a while the larvae die within the host and sometimes calcify, leaving characteristic crescent-shaped structures seen in X-ray. The x ray chest shows multiple calcified, coiled and c shaped nymphs within the lung and pleura. Some of nymphs appear rectilinear in outline because they are seen end on. The differential diagnosis calcified cysts of cysticercosis is easy: the calcified nymphs of Armillater have a distinctive shape and are not found in muscle [5,6]. Occasionally, the disease can be fatal [7]. There is no treatment, the only option is to prevent the disease by washing hand while you manipulate snakes, by cooking well snake before the consumption.

Conflict of interest statement

We declare that we have no conflict of interest.

References