Eosinophilic meningitis due to Angiostrongylus cantonensis with confirmed finding of intrathecal parasite

Meningite eosinofílica por Angiostrongylus cantonensis com confirmação intratecal do parasita

Sir, the eosinophilic meningitis is an important group of reactive meningitis due to parasite. Of several parasites, Angiostrongylus cantonensis is a round worm that can induce this neurological disorder. The infective parasite larva can be seen in snail and the ingestion of infected snail can result in infestation. This disease can be seen in many tropical countries^{1,2}. In Thailand, there are around 1,000 case reports of eospinophilic meningitis and it is usually assumed that the cause of disease is due to Angiostrongylus cantonensis infestation. It should be noted that almost all cases are presumptive diagnosed to have parasitic infestation. Only a few cases with confirmed finding of intrathecal parasite can be seen. Here, the authors try to summarize the evidences of eosinophilic meningitis due to Angiostrongylus cantonensis with confirmed finding of intrathecal parasite in Thailand. The literature search based on PubMed, SCOPUS and ThaiIndexMedicus was performed and there are only 2 reports on 2 cases^{3,4}. The first case is a 29 years old male presenting with headache and the second case is a female infant (8 months old) presenting with prolonged (2 week period) fever and seizure. The cerebrospinal fluid analyses

in both cases match with the eosinophilic meningitis. The number of identified worm in the cerebrospinal fluid of the first and second case is equal to 12 and 11 worms, respectively. The history of snail intake can be seen only in the first case. The second case get no specific antiparasitic drug and the spontaneous recovery can be observed. Based on this information, it can be seen that lower than 1% of all eosinophilic meningitis cases in Thailand have the confirmative finding of intrathecal Angiostrongylus cantonensis. Most cases are presumptively diagnosed due to clinical history of headache and intake of snail⁵. Although some new diagnostic tools such as antigenic test have been recently introduced the false positive can still be expected and this cannot be the definitive diagnosis as detection of parasite⁶. Based on the present data, there are many interesting information: a) the infection can be seen in infant (and the chief compliant of headache cannot be observed); b) the infection can be spontaneously resolved; c) the history of snail intake might not be available.

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