

Subarachnoid hemorrhage due to neurognathostomiasis: a summary on reported Thai cases

Hemorragia subaracnoidea devido à neurognastomiasis: um sumário de casos relatados na Tailândia

Sir,

The subarachnoid hemorrhage is an important neurological problem which is usually due to the problem of vascular structure. However, there are also other uncommon causes. Gnathostomiasis is a tropical parasitic infection that is common in Southeast Asia. This disease usually causes migratory swelling with eosinophilia. Internal organ involvement is also possible. Focusing on neurognathostomiasis, it is a rare presentation. The subarachnoid hemorrhage can also be due to the neurognathostomiasis. In this short article, the authors report a summary on previous publications on Thai patients with subarachnoid hemorrhage due to neurognathostomiasis. According to the literature search (PubMed and ThaiIndexMedicus), there are at least 20 Thai cases with reported subarachnoid hemorrhage due to neurognathostomiasis (due to the incomplete data in the primary records, the demographic data of the patients cannot be summarized)^{1,2,3}. Of these cases, all have the classical signs and symptoms of subarachnoid hemorrhage and brain imaging by CT or MRI confirm for hemorrhagic

problem. Of interest, there is no case that imaging can identify the parasite. All cases were serological and immunological diagnosed for neurognathostomiasis (in both sera and CSF). In all case, eosinophilia and high CSF eosinophil count can be seen. Focusing on the outcome of diseases, there is no report on fatality. Finding of high CRF eosinophil count in adding to red blood cell due to hemorrhage is usually the first clue for further diagnosis of neurognathostomiasis. This seems that the subarachnoid hemorrhage due to gnathostomiasis has a better prognosis than subarachnoid hemorrhage due to vascular accident. Medical treatment by antiparasitic drug has no role but the basic surgical management of subarachnoid hemorrhage can be effective. It is also recommended that neurognathostomiasis should be included as an important differential diagnosis for subarachnoid hemorrhage, especially for the patients living or having history of traveling to tropical endemic areas.

Somsri Wiwanitkit¹, Viroj Wiwanitkit^{2,3,4,5}

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¹Wiwanitkit House, Bangkhuae, Bangkok Thailand;

²Hainan Medical University, China;

³Joseph Ayobabalola University, Nigeria;

⁴University of Nis, Faculty of Medicine, Serbia;

⁵Dr DY Patil Medical University, India.

Correspondence: Somsri Wiwanitkit; Wiwanitkit House, Bangkhuae, Bangkok Thailand 10160; E-mail: somsrwiwan@hotmail.com

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