Congenital Zika syndrome and neuroimaging findings

Dear Editor,

We read the publication on "Congenital Zika syndrome and neuroimaging findings" with a great interest[1]. Ribeiro et al. concluded that "*Although the neuroimaging findings in congenital Zika syndrome are not pathognomonic, many are quite suggestive of the diagnosis, and radiologists should be prepared to interpret such findings accordingly*" and raise a question "what do we know so far?" We would like to share ideas and experience of this topic. In our country, in tropical Southeast Asia, the Zika virus infection is usually asymptomatic[2] and there is usually negative neurological finding. This means that there is not only no pathognomonic finding but also no finding. The use of neuroimaging investigation has limited role in investigation of the case in our setting[3].

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Reply: Congenital Zika syndrome and neuroimaging findings

Initially, we would like to thank Joob and Wiwanitkit for their letter and their interest in our review article on neuroimaging findings in congenital Zika syndrome (CZS)[1], as well as for affording us the opportunity to discuss the topic further. We believe that this facilitates the exchange of information and the expansion of knowledge about CZS. A careful reading of the letter shows that Joob and Wiwanitkit are doubtful that there are any neuroimaging findings characteristic of CZS, because they deny the existence of this entity among the cases of Zika occurring in their region. However, it is important to mention that our review article was based not on our opinions but on evidence, as well as on an active search of recent articles on the subject published in major international journals, including the New England Journal of Medicine[2–7], Lancet[8], Radiology[9], and others[10–16]. Therefore, the data in the current literature are sufficient to foster a belief in the teratogenic potential of the Zika virus[2,6]. Nevertheless, we carefully considered whether or not there is a causal relationship between infection with the Zika virus and malformations of the central nervous system, which led to the discussion of the topic in the section "Causality between malformations and congenital infection with the Zika virus" in our article.

Certainly, paradigm shifts require cautious reflection and are sometimes difficult to accept, especially when they are related to a disease that was previously unknown worldwide. The situation is complicated by the fact that the last epidemic of birth defects caused by an infectious pathogen (the rubella virus) occurred more than 50 years ago[2]. Ultimately, we believe that personal experiences are valuable and can make important contributions within the scientific community. However, at this moment, we need information based on scientific evidence rather than personal opinions. Further studies should bring greater clarity to this issue.

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