

Congenital Zika virus infection in twin pregnancies

Infecção pelo Zika virus em gravidez gemelar

Dear Editor,

The publication on “Congenital Zika virus infection in twin pregnancies” is very interesting¹. Linden et al. reported on “two cases of twin pregnancies exposed to the Zika virus, but with only one of the fetuses affected with microcephaly and brain damage¹.” Indeed, the transplacental transmission of the Zika virus has been confirmed and direct cytopathology due to the virus is possible². Nevertheless, not all cases of infection will result in symptomatic clinical manifestation and most cases are usually asymptomatic³. In the case of identical twins exposed to the virus, if there is discordance of susceptibility, it might imply that there may be little or no role of the genetic background on susceptibility or resistance to the virus. Nevertheless, there can also be some other explanations for the discordance. Firstly, there might be some variant

in the placenta and umbilical cord, or in the infant, and this might act as a preventive barrier to infection. In the report by Linden et al.¹, there is no data on the placenta and umbilical cord, hence we cannot draw a final conclusion on this issue. Secondly, the disorder in the abnormal fetus might be due to another cause, such as a somatic mutation, which might occur sporadically. Since there is no complete genetic workup comparing the normal and abnormal twin fetuses, and there is also no proof of viral infection in both fetuses, the conclusion also cannot be reached. Finally, although the mother might get the infection, and as transplacental transmission is possible, virus identification in both fetal brain and umbilical cord is required for confirmation of actual vertical transmission⁴.

Beuy Joob¹, Viroj Wiwanitkit²

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¹Sanitation 1 Medical Academic Center, Bangkok Thailand;

²Hainan Medical University, China.

Correspondence: Beuy Joob; Sanitation 1 Medical Academic Center, Bangkok Thailand; E-mail: beuyjoob@hotmail.com

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