

Antivirals in treatment of H1N1 infection: are they really effective?

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Dear Sir,

We read with great interest the article by Calitri et al. [1], who have analyzed the clinical features of hospitalized children with 2009 H1N1 influenza virus infection in Italy. The description on the use of oseltamivir needs comment.

In the article, the authors have described that oseltamivir was administered to the majority of patients (81%), and they support a prompt treatment with oseltamivir because the drug is generally well tolerated and able to reduce the incidence of complications, the median length of illness, and the duration of hospitalizations in both healthy and at-risk subjects. To our knowledge, there has been no independent randomized/clinical trial conducted to prove this. However, in a recently published meta-analysis of four randomized trials of the treatment of influenza (oseltamivir=2, zanamivir=2) involving 1,766 children and three randomized trials for postexposure prophylaxis (oseltamivir=1, zanamivir=2) involving 863 children, none of the included trials tested efficacy with the current pandemic strain. The authors concluded that, though neuraminidase inhibitors shorten the duration of illness in children with seasonal influenza, their effects on the incidence of serious complications and on the current A/H1N1 influenza strain remains to be determined [3]. In another meta-analysis done on the role of neuraminidase inhibitors in adults, though neuraminidase inhibitors reduced the symptoms of influenza modestly, the authors were unsure of the generalizability of their conclusions from seasonal to pandemic influenza [2]. Though there has been widespread

use of oseltamivir for treating current pandemic H1N1 infection, independent randomized trials to resolve the uncertainties surrounding effectiveness are needed. The authors also mentioned that prolonged and high-dose treatment with oseltamivir was necessary in children admitted to the ICU. Current guidelines do not recommend this. Further research in this area is needed before any recommendation can be made.

Conflict of interest None.

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References

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