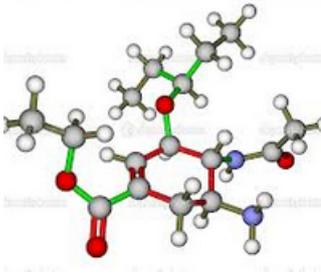


Lifesaving flu drugs under-utilized in hospitalized children

By ACSH Staff — November 26, 2013



There are exactly two drugs that act as specific antiviral agents against

influenza. Both of them (Relenza and Tamiflu) act by the same mechanism by inhibiting the enzyme neuraminidase, which is responsible for cutting free the newly formed virus particles from the host cell. In the absence of neuraminidase, the new viruses will stick to the surface of the infected cell and thus not be available to propagate the infection.

Other flu remedies, such as ibuprofen control the symptoms of the flu, but do not prevent the proliferation of the virus. And the flu vaccine, which is very useful (although not perfect) in preventing the infection, is useless in its treatment.

Since the approval of Relenza and Tamiflu (both in 1999) there have been questions about the benefits of these drugs. For the most part, their utility has been considered modest. If taken within the first two days of a flu infection, they seem to knock off about a day of the infection and possibly decrease the degree of symptoms.

Yet, the authors of a [study in *The Journal of Pediatrics*](#) ^[1] argue that these medications are being underutilized in treatment of influenza in children.

[Janice K. Louie](#) ^[2], MD, and colleagues of the California Department of Public Health analyzed data from medical records during the period of from April 3, 2009, through September 30, 2012 to examine the outcomes of children aged 0 to 17 years who were hospitalized in ICUs with laboratory-confirmed influenza.

The results are not spectacular, but there does seem to be a real benefit in using these drugs for critically ill children. The authors collected data on 784 influenza patients younger than 18 who were hospitalized in ICUs. Of 653 cases where neuraminidase inhibitor treatment was used, 38 patients (6%) died compared with 11 (8%) of 131 untreated patients.

And, as with adults, early treatment is essential. According to the authors, Treatment within 48 hours of illness onset was significantly associated with survival.

According to Dr. Peggy Weintrub, the chief of pediatric infectious diseases at the University of California, who was not involved in this study said, Antivirals matter and they decrease mortality,

and the sooner you give them the more effectively they do that We didn't have nice proof on a large scale until this study.

In full agreement is Dr. Nathan Kuppermann, the chairman of the emergency medicine department at University of California, Davis, who said that administering antiviral drugs to children in the intensive care unit was a no-brainer.

COPYRIGHT © 1978-2016 BY THE AMERICAN COUNCIL ON SCIENCE AND HEALTH

Source URL: <https://www.acsh.org/news/2013/11/26/lifesaving-flu-drugs-utilized-hospitalized-children>

Links

[1] <http://pediatrics.aappublications.org/content/early/2013/11/19/peds.2013-2149>

[2]

<http://pediatrics.aappublications.org/search?author1=Janice+K.+Louie&sortspec=date&submit=Submit>