Tamiflu doesn't offer relief promised, study finds

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For the nearly 62 million Americans infected with influenza each year, oeseltamivir, commonly called Tamiflu, promises to offer relief. New research from the University of Georgia finds the medication may not have all of the benefits flu sufferers and doctors are hoping for.

"Based on published trials and the conventional wisdom, we thought Tamiflu prevents complications, prevents hospitalizations and is especially good in the vulnerable populations, but we didn't find support for any of that," said Mark Ebell, associate professor of epidemiology in the UGA College of Public Health.

Findings were based on a meta-analysis of three published and eight unpublished double-blind, placebo-controlled clinical trials of Tamiflu that took place in several countries between 1997-2000.

Results of the study will be published in an upcoming issue of *Family Practice*. Advance access is available online.

While other reviews have reported reductions in complications due to Tamiflu's medicinal effect, Ebell's analysis found no decrease. His team's analysis eliminated the inclusion of acute bronchitis, a self-limiting viral illness, as a complication and only considered pneumonia, sinusitis and otitis media as complications requiring antibiotics.

"We saw a small difference in the likelihood that pneumonia would develop in those patients who were later confirmed to have influenza,

but it was only a 0.9 percent reduction," Ebell said. "However, if you look at all patients given oseltamivir for suspected influenza, which is what happens in practice, there was no difference in pneumonia. So, we found no real difference in the likelihood of important complications."

Ebell and his team also looked at the duration of symptoms. "When we looked at the data, it was actually pretty disappointing," Ebell said. "In the published studies, there appeared to be about a 30-hour benefit for people with confirmed influenza, but when we looked at all the data and looked at who would be given the drug in the primary care office with suspected flu, there was only about a 20-hour benefit."

For patients who waited longer than 24 hours to seek care, the benefits decreased drastically.

"That makes sense based on what we know about how the drug works," he said.

Tamiflu prevents respiratory cells from bursting open and releasing viral particles. Once cells begin to burst, the medication loses its effectiveness. Too often, physicians hoping to help ailing patients will write prescriptions long after the 24-hour window of treatment closes, Ebell said.

"The potential harm is the development of influenza viruses resistant to Tamiflu," he said, "as well as the cost, which is not trivial, the side effects of the drug" and the overuse of drugs for an illness that-in most people-will have run its course in a short time period.

While most of the trials enrolled participants who were generally healthy, two studies selectively included people who were over age 65, and another study looked specifically at patients with cardiopulmonary disease.

"Those are really important populations to study because, as doctors, we sure hope (Tamiflu) helps those folks who are most vulnerable: elderly, those with chronic disease and children," he said.

However, these studies were not published, and neither found a reduction in complications in these high-risk populations. Overall, hospitalizations were uncommon, reported for 33 of the 2,633 patients treated with Tamiflu and 22 of the 1,694 patients given the placebo.

More information: fampra.oxfordjournals.org/cont … 13-9e67-400aed214842

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