Antiviral Drugs and Influenza

Please note the January 14, 2006 CDC Health Alert Notice (HAN) in which CDC recommends that neither amantadine nor rimantadine be used for the treatment or prevention (prophylaxis) of influenza A in the United States for the remainder of the 2005-06 influenza season: www.cdc.gov/flu/han011406.htm.

Four antiviral drugs (amantadine, rimantadine, zanamavir and oseltamivir) have been approved by the U.S. Food and Drug Administration (FDA) for treatment of influenza. However, you will need to begin taking an antiviral drug within 2 days after becoming sick. When used in this manner, these drugs can reduce influenza symptoms and may shorten the time you are sick by 1 or 2 days. The drugs also may make you less contagious. All of these drugs must be prescribed by a doctor and taken for 3-5 consecutive days (5 days for oseltamivir and zanamavir). The 4 antiviral drugs are effective only against influenza viruses. They will not help symptoms associated with the common cold or many other influenza-like illnesses caused by viruses that circulate in the winter.

Three antiviral drugs (amantadine, rimantadine, and oseltamivir) are approved by the FDA and are commercially available for use in the United States to prevent influenza. All of these medications are prescription drugs, and a doctor should be consulted before the drugs are used. When used for prevention, they are about 70% to 90% effective in preventing illness in healthy adults.

All of the antiviral drugs may be effective for influenza A viruses. However, only oseltamivir and zanamavir are effective for influenza B viruses. Also, recent evidence indicates that a high proportion of currently circulating influenza A viruses in the United States have developed resistance to amantadine and rimantadine. Please see the January 14, 2006 CDC Health Alert Notice for more information: www.cdc.gov/flu/han011406.htm.

All of the antiviral drugs are different in terms of who can take them, how they are given, any dosing changes based on age or medical conditions, and side effects (http://www.cdc.gov/flu/protect/antiviral/sideeffects.htm). Your doctor can help decide whether you should take an antiviral drug and which one you should use.

Use of Antiviral Drugs

Antiviral drugs are most often used to help control influenza outbreaks in institutions, for example in nursing homes or in hospital wards, where people at high risk for complications from influenza are in close contact with each other. Antivirals also have been used on cruise ships or similar settings to help control influenza outbreaks.

In the event of an outbreak, public health practice is to combine the use of influenza vaccine and antivirals. For example, nursing home residents and staff are given vaccine during an outbreak and also are given antivirals to prevent influenza until the vaccine takes effect (about 2 weeks). This practice continues as long as influenza is occurring in that setting.

Doctors also can prescribe influenza antivirals to people not living in institutional settings, but treatment must begin within 2 days of the onset of symptoms for the drugs to be effective. Although all antivirals lessen symptoms and shorten the duration of illness, only one (oseltamivir) has been shown in a study to reduce lower respiratory tract complications requiring antibiotics. They do not cure influenza outright.

When considering the use of antivirals it is important to remember that most healthy people recover from influenza without complications.
Who Should Get Antiviral Drugs

People who are at high risk of serious complications from influenza may benefit most from antiviral medications. This includes: people 65 years of age and older, children 12-23 months of age, people with chronic medical conditions (for example, heart or lung disease, diabetes), and pregnant women. (Note that none of the antiviral medications is approved for use in children less than 1 year of age.) Although CDC has provided guidelines for health-care professionals on the use of antiviral drugs (www.cdc.gov/flu/professionals/treatment/0506antiviralguide.htm), your doctor will decide whether you should receive antiviral drugs this season. The guidelines for use of influenza antivirals are not intended as recommendations for use of these medications in other situations, such as outbreaks of new strains of avian influenza.

For Treatment: If you become sick with influenza-like symptoms this season, your doctor first may give you a test to find out whether you have influenza. (Symptoms include fever (usually high), headache, tiredness, a sore throat and dry cough, nasal congestion, and body aches.) Your doctor also will consider a number of factors before making a treatment decision, such as your risk for complications from influenza.

For Prevention: In the event of an influenza outbreak in a home, institution, or community, your doctor may choose to prescribe antivirals to you as a preventive measure, especially if you are at high risk for complications from influenza. Also, if you are in close contact with someone who is considered at high risk for complications, you may be given antiviral drugs to reduce the chances of passing influenza to the high-risk person.

For more information, see the following:

- Antiviral Drugs: Summary of Side Effects
  http://www.cdc.gov/flu/protect/antiviral/sideeffects.htm

- Background Information for Clinicians: Antiviral Agents for Influenza
  http://www.cdc.gov/flu/professionals/antiviralback.htm