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First Flu Isolate Identified In Juneau

Case Report

On October 3, a 78-year-old male with arteriosclerotic heart disease and renal insufficiency was admitted to a Juneau hospital with fever (102 ° F), nausea, dry cough, delirium and dehydration. His chest x-ray was clear, WBC count was 2000, and platelet count was 54,000. The patient had not yet received his annual flu shot. A specimen for viral culture was obtained on October 3 and sent to the State Lab - Fairbanks; influenza type A was isolated. His wife stated that she had fever, chills and cough 3 days earlier. The patient recovered and was discharged on October 6. The isolate has been sent to U.S. Centers for Disease Control and Prevention for further identification.

Discussion

This is the first isolate of influenza virus in Alaska during the 1997-98 influenza season. Although final identification of the isolate is incomplete, it is most likely one of the type A strains contained in the 1997-98 influenza vaccine.

In August, a strain of type A influenza virus that usually infects only birds (H5N1) was isolated in Hong Kong from a 3-year-old child who died of Reye syndrome during an acute respiratory illness. All other flu isolates identified in Hong Kong during 1997 have been identified as human influenza strains. Influenza types A(H1N1), A(H3N2) and B are expected to continue to circulate during the 1997-98 influenza season. The strains included in the 1997-98 vaccine can be expected to provide protection against these strains.

Influenza causes significant morbidity and excess mortality each year in Alaska. Influenza is an acute respiratory tract illness characterized by sudden onset of high fever (up to 104 ° F), cough, sore throat, headache and myalgia. Symptoms usually last for 3 days but may persist for up to 8 days. Children may also have gastrointestinal symptoms such as nausea, vomiting and diarrhea.

Prevention

Influenza vaccine is 60-90% effective in preventing infection in healthy young adults when vaccine strains are well matched to circulating strains. Among elderly persons residing in nursing homes, influenza vaccine has been shown to be effective in preventing hospitalization, pneumonia, and death. **The Section of Epidemiology recommends that persons either at increased risk for influenza and related complications or who are potentially capable of transmitting influenza to high risk persons be vaccinated** (see *Epidemiology Bulletin* number 35, August 28, 1997).

The antiviral drugs amantadine and rimantadine may be successful in preventing illness caused by type A influenza in unvaccinated or recently vaccinated persons. In studies with otherwise healthy adults and children, amantadine has been proven to be 70-90% effective in preventing illness caused by naturally occurring strains of type A influenza if administered prior to and throughout an epidemic. The decision to use amantadine or rimantadine should be based on individual circumstances as well as the current epidemiologic assessment of type A influenza activity in the community.

Surveillance

The Section of Epidemiology encourages health care providers to participate in influenza surveillance. Successful isolation of influenza virus is increased by the collection of nasal washes, nasopharyngeal swabs, or throat swabs from patients 1 to 3 days after the onset of symptoms. **Culture materials are available free-of-charge from the State labs in Fairbanks and Anchorage. Viral cultures and isolation are performed free-of-charge.** Unusual occurrences of influenza-like illness, especially outbreaks among vulnerable persons such as nursing home residents, should be reported to the Section of Epidemiology.

(Reported by Lindy Jones, MD. Submitted by Sue Anne Jenkerson, RNC, MSN, FNC, Section of Epidemiology.)