

Influenza encephalitis

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What is influenza encephalitis?

Influenza encephalitis, also known as influenza-associated encephalitis, is a rare but serious neurological complication that can occur as a result of influenza virus infection. Influenza encephalitis typically occurs as a complication of a severe infection by certain strains of the influenza virus, particularly influenza A and B viruses, and usually affects children and young adults. The exact mechanism by which the virus triggers encephalitis is not fully understood, but it is thought to be related to the immune response and inflammation.

Symptoms

In a broad sense, clinical characteristics encompass a combination of flu symptoms and central nervous system (CNS) dysfunction indicators. The conventional flu symptoms include fever, cough, nasal discharge, sore throat, and headache. Additionally, there are CNS-related neurological manifestations such as seizures, alterations in consciousness, reduced cognitive processing encompassing speech, motor paralysis or sensory loss, unusual or delirious behaviour, and shifts in mental state. The emergence of neurological complications may occur within a span of several days following the initial onset of flu symptoms.

Diagnosis

Diagnosis is usually based on clinical symptoms, a history of recent influenza infection, and neurological examination. A positive flu test via nasal/throat swab can be present in the early stage of the infection with conventional flu symptoms, though this can be negative at the later stage with symptoms of encephalitis. Brain imaging, such as magnetic resonance imaging (MRI) or computerised tomography (CT) scans may show signs of inflammation in the brain.

Treatment:

Treatment generally involves hospitalisation and supportive care to manage symptoms and ensure the patient's stability. Antiviral medications like oseltamivir (Tamiflu) may be prescribed to target the influenza virus itself. Anti-inflammatory medications and other therapies might be used to manage the brain inflammation.

Outcomes

The prognosis for individuals with influenza encephalitis can vary widely. Some cases can be mild and resolve with appropriate treatment, while others can be severe and result in long-term neurological deficits or even death. Early diagnosis and treatment are crucial for better outcomes.

Prevention

The best way to prevent influenza encephalitis is to get vaccinated against influenza. Practicing good hygiene, such as washing hands regularly, and avoiding close contact with sick individuals, can help reduce the risk of infection.

Influenza encephalitis is relatively rare, and most cases of influenza result in milder respiratory symptoms. However, it is important to be aware of this potential complication, especially in individuals who are at higher risk, such as young children, the elderly, and individuals with compromised immune systems.

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Thank you!

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