What is influenza? Symptoms, signs, treatment, and its prevention

Influenza is caused by influenza viruses. It is also called common flu which is slightly different from common cold. There are two main types of influenza, influenza A and influenza B. Most cases of influenza are caused by influenza A.

Each year influenza virus can change a little bit and it can cause the varying severity and frequency of infections. It is more common during a flu season which coincides with winter and varies across the globe.

Symptoms and signs:

The common symptoms of influenza infections are

- fever
- runny nose
- Sinus congestion
- Headache, cough
- breathlessness
- muscle pain
- lethargy
- tiredness

It can cause a significant nausea and vomiting or diarrhea too in children. It can present it with various other rare symptoms related to systemic manifestation of influenza viral infection.

Incidence:

The rate/incidence of influenza virus varies from 3% to 15% and it can change from year to year and also depending on the location. Countries where there are higher rate of viral swabs taken pick up a higher incidence of disease. In third world countries where screening or diagnostic tests are not done that frequently, documented rate of influenza infections are low. It is most likely related to diagnostic tests rather than the actual incidence.

Complications:

influenza or flu is generally mild disease in majority of the people, and they get better within a few days. But in a small number of people, either very young or elderly or people who have underlying immune diseases, can get significant severe disease-causing respiratory failure, heart failure and systemic inflammatory response syndrome or sepsis. These patients can deteriorate very quickly and may need admission to ICU. A few people can die of influenza infection.

Transmission:

Influenza is transmitted in micro air-droplets as people cough, sneeze or talk. Its transmission can start from very start of illness to five to seven days from the start of illness. Patients with underlying immune deficiency can spread it for longer.

Diagnosis:

The definitive diagnosis of influenza requires viral PCR test taken from their nose or throat of the patients. The symptoms of influenza infections are so similar to many other respiratory viruses and cannot be distinguished just on basis of symptoms only.

Treatment:

Mild viral illness due to influenza virus does not need any treatment. The symptoms settle within few days and patient may need just symptomatic support with paracetamol and good hydration. Patients with underlying immune disease or elderly age group, may benefit from antiviral medication. Patients who develop secondary chest infection or the complications may also need to be hospitalized.

Managing symptoms at home:

It is important to maintain a good hydration and take medication to help with fever. Steam inhalation and gargles may be useful.

When to go to hospital

Patients with persistent fever, breathlessness, decreased consciousness level should be assessed in a hospital.

Vaccination:

There is an influenza vaccine which should be administered on annual basis especially in high-risk population, to reduce the frequency and severity of illness. It is not 100% protective but can reduce the severity of illness significantly.

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