Provisional recommendations for the antiviral treatment of confirmed or suspected patients infected by the influenza A (H1N1) virus and close contacts

April 30th, 2009

This provisional technical guide will be revised and updated in accordance with the evidence of evolution of the epidemic and clinical management of case.

Clinical case description
Acute febrile respiratory illness (fever ≥38°C) with the spectrum of disease from influenza-like illness to pneumonia.

1. A **confirmed case** of swine influenza A(H1N1) virus infection is defined as an individual with laboratory confirmed swine influenza A(H1N1) virus infection by one or more of the following tests*:
   - RT-PCR
   - viral culture

2. A **suspect clinical case** includes both the moderate forms of the influenza like disease as well as the more severe forms (acute infections of the lower respiratory tract including pneumonia and severe acute respiratory infection; and the determination of an appropriate course of treatment should consider:

- Positive influenza A test, but unsubtypable by reagents used to detect seasonal influenza virus infection.
- History of close contact with a person who is a confirmed case of infection with the new subtype of influenza A (H1N1) within 7 days prior to the onset of symptoms.
- History of travel to a locality (community) where there are confirmed cases of infection with new subtype influenza A (H1N1) within 7 days prior to the onset of symptoms
- Residency in a community where there exist confirmed cases of infection with the new subtype of influenza A (H1N1).

Close contact is defined as interaction within at least one meter with a person who is a confirmed or suspected case of swine influenza A (H1N1) during the case's infectious period (from one day before until seven days after the onset of symptoms).

* Note: The test(s) should be performed according to the most currently available guidance on testing (http://www.who.int/csr/disease/swineflu/en/index.html).

Antiviral Treatment

These recommendations on the use of oseltamivir may change, in accordance with more available information on the effectiveness of treatment, clinical evolution of the cases, as well as on the susceptibility of the virus. The present studies indicate the susceptibility of the new subtype of the influenza A (H1N1) virus to oseltamivir and zanamivir.

At this time, evidences of significant impact of treatment with oseltamivir in patients with slight symptoms of influenza does not exist. Nevertheless, in confirmed or suspected cases of infection with the new subtype of influenza A (H1N1) that fulfill more than one of the clinical criteria of severity, treatment should be initiated urgently.

CLINICAL CRITERIA OF SEVERITY: fever greater than 38ºC, dyspnoea, tachypnea, hypotension, hypoxia, and evidence of chest X-ray abnormality.

Published studies referring to seasonal influenza demonstrate that treatment is most effective if administered 48 hours after the onset of symptoms, but it also offers benefits if administered later in terms of reducing mortality or length of hospitalization of patients.

The doses and duration of treatment are shown in the table.

Table. *Treatment doses of oseltamivir*

Adults: 75 mg/po each/12 h for 5 d.
Children older than one year: 2 mg/kg/po up to a total of 75 mg c/12 h for 5 d.

There exists a lack of data about the safety of the use of oseltamivir in children less than one year of age, and indications for treatment and prophylaxis should be evaluated by a pediatric specialist on a case by case basis.

Pregnant Women

Since no clinical studies exist about the safety of this medication for pregnant women, oseltamivir and zanamivir are classified as Category C medications by the FDA. Careful assessment of benefits and risks should be carried out before prescribing. Given that zanamivir (2 inhalations (5mg each) / 12 hours, for 5 days) has limited systemic absorption it is the preferred option by some specialists, when it is available.

Adverse effects

Nausea, vomiting and headache are the most frequent effects of oseltamivir. Taking the drug with food may reduce the incidence of gastrointestinal effects. Neuropsychiatric events have occurred in some children and adolescents, but causation has not been established.

It is not advised to take antiviral medicines in the absence of clinical or public health recommendations.