FAQ in the Management of Severe Community Acquired Pneumonia

February 21, 2003

1. **What is the case definition of severe Community Acquired Pneumonia (CAP)?**

   - According to the ad hoc Working Group on the subject, severe CAP refers to cases of CAP requiring assisted ventilation (limited to intubated cases only) or CAP cases under ICU/HDU care.

2. **What is the background incidence of atypical Community Acquired Pneumonia (CAP) admitted to ICU?**

   - In last winter, from December 2001 to February 2002, there were on an average 74 CAP cases admitted to ICU, mainly atypical pneumonia.

3. **What to do when I have a patient suffering from severe Community Acquired Pneumonia (CAP)?**

   - Such cases should be reported to the Secretariat of TFIC, HAHO Fax No: 2881-5848 (HA intranet mail: "Secretariat of Infection Control Task Force") using the report form previously circulated (re-attached again for your easy reference).

   - The Secretariat of TFIC would update the hospital's ICTs and Duty Microbiologist of such cases.

   - The hospital ICTs should complete the CRF and send promptly to Dr. Dominic Tsang, subject officer, by fax at 2958 6790 for compilation.

   - Send additional tests as outlined below.

4. **What is the arrangement for laboratory testing?**

   - Specimens should be collected (NPA, serum samples) and sent to GVU, DH by existing arrangement. GVU would test for all potential agents of atypical pneumonia.

   - Additional specimens (NPA, clotted blood and EDTA blood samples) should be collected and sent to QMH Microbiology laboratory (attn: Dr. Malik Peiris) through the hospital's Pathology department. Special test and detailed analysis on H5 avian influenza would be performed.

   - Such arrangement of special tests would be reviewed by 28 February 2003 to assess the need for continuation.

   - Hospital ICT would follow up on the cases reported and make sure the tests are sent promptly.

5. **Can I send for special testing on other CAP cases?**

   - Others cases of CAP, not fulfilling the case definition of severe CAP, should be investigated according to normal routine practice i.e. specimens should be sent to GVU-DH for testing on agents of atypical pneumonia.

- Also, for cases of CAP not fulfilling the case definition of severe CAP, if the patient is having lymphopenia, specimens (NPA, clotted blood and EDTA blood samples) could be sent to QMH for special testing on H5 avian influenza.

6. What follow up actions would be done?

- HAHO would inform the reported cases to DH for epidemiological analysis.
- The Working Group would compile a database on all such cases, and for analysis on possible epidemiological linkage.
- Test results would be monitored and inform hospital once available and advise on further measures.

7. What are the Infection Control Measures?

The recommended method of isolation for influenza is droplet precautions in additional to Universal Precautions. This is because the disease is not airborne, but by large particle droplet (larger than 5 μm) which will not be transmitted beyond 3 feet from the source.

Droplet Precautions includes:

- Place patient in a room with other patient(s) having influenza (**cohorting**). Special air handling and ventilation are not necessary. When cohorting is not possible, maintain separation of at least 3 feet from other patients.
- Staff should have barrier apparels (gloves and gowns) when coming into contact with the patient's blood, body fluids, secretions, excretions, mucous membranes and contaminated items.
- Wear a mask when working within 3 feet of the patient.
- Wash hands after removal of gloves and before nursing another patient even when contact is only with non-contaminated items.
- Proper disinfection of the environment and equipment contaminated with blood, body fluids, secretions and excretions is required.

8. What is the Use of Antivirals?

Amantadine can reduce the severity and duration of signs and symptoms of only influenza A illness when given in the early stage of infection. Amantadine is associated with neurological and gastrointestinal side effects. Cautions must be exercised for people with renal insufficiency. Resistance emerges within 2-5 days in around 30% of cases and such resistant viruses are readily transmissible.

The two new anti-influenza drugs, Zanamivir (Relenza) and Oseltamivir (Tamiflu), are neuraminidase inhibitors and are active against both influenza A and B.

- Zanamivir is approved for use in patient aged 7 years or older. Oseltamivir is approved for treatment of patient aged 1 year or older.
- Oseltamivir is also approved for influenza chemoprophylaxis among person aged 13 year or older.
- When treatment is commenced within 36 to 48 hours of the onset of influenza, both drugs can reduce clinical symptoms of influenza by approximately 1 day.

- Zanamivir may rarely cause bronchospasm in patients with asthma and bronchodilators must be readily available when it is used on such patients. In patients on inhaled bronchodilators, use it before the dose of zanamivir. Oseltamivir has gastrointestinal side effects including nausea (10% in adults, 14.3% in children) and vomiting (9% in adults) which might be less severe when the drug is taken with food.
- Development of viral resistance to zanamivir and oseltamivir during treatment has been reported.
- The use of these new agents as chemoprophylxis among contacts should base on clinical symptoms, the degree of contact with index cases, and subject to evaluation by the attending physician.

9. Where can I get further information and advice?

- Secretariat, TFIC
- Hospital Infection Control Team
- Seminars on the subject are being organised and would be announced soon.
- Guideline on "Use of Amantadine in the Management of H5N1 Infections" issued by Department of Health, 20 February 2003 (attached)

21 February 2003

Hospital Authority