Influenza

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Zhang Zhong Jing (about 150-219AD)

Ye Tian Shi (1667-1746)

Wu Ju Tong (1758-1836)
INFLUENZA IN CHINESE MEDICINE

1. WESTERN MEDICINE VIEW

a) INFLUENZA

Epidemiologists predict a new influenza pandemic during the current winter. In fact, whether there will be a new pandemic or not, influenza spreads every winter and accounts for a substantial mortality every year.

Influenza viruses are characterized by a high variability and high infection rate. The so-called “Spanish Flu” of 1918 killed an estimated 40-50 million people world-wide, more than did the First World War.1 Two other pandemics occurred in 1957 with 2 million deaths and 1968 with 1 million deaths (“Asian” and “Hong Kong” Flu respectively).2 The most recent large epidemic in the United Kingdom was in 1989-1990, when an estimated 26,000 people died in association with influenza.3

2. Ibid.
There are three types of influenza virus, A, B and C. Influenza A viruses are found in humans and animals, whereas B and C are found only in human beings. Infection with influenza produces an immune response with the production of antibodies in the blood which neutralise the virus. If the person encounters the same influenza virus again while the antibodies are still present, the body is protected and the person should not develop the infection.

It is a characteristic of influenza viruses, and especially of the A virus, that they frequently mutate into sub-types so that the virus is “one step ahead” of the natural immunity created by the body. It is usually when sub-types develop that epidemics occur because the antibodies produced will not protect individuals against an influenza virus in which the surface proteins have undergone a significant change since the previous infection.
An example of a new subtype a few years ago was the H5N1 “avian influenza” virus, first isolated in Hong Kong in May 1997, which previously had only been found in birds and was not associated with disease in humans. The latest example of a sub-type is of course the H1N1 virus responsible for the so-called “swine flu”.

Influenza viruses spread from person to person by tiny droplets produced by coughing and sneezing. The initial site of infection is the lining of the respiratory tract, and the infection has a short incubation period of up to five days. The virus is shed in respiratory secretions starting about one day before the onset of the illness and lasting for about three to five days.
The classic symptoms of influenza include fever, malaise, headache, aches and pains in the muscles and joints, and a characteristic dry cough and sore throat. The acute illness usually lasts for three to five days but recovery may be slow, and cough and tiredness may persist for two to four weeks post infection.

Complications may occur in groups of patients who are particularly at risk (e.g. those with underlying lung disease or those with defective immune systems), and usually affect the lungs and the heart. Upper and lower respiratory tract infections are common and subsequent invasion of the lungs by bacteria may result in the development of pneumonia.

Fever, malaise, headache, body aches, dry cough, sore throat
b) INFLUENZA A (H1N1)
The new strain of influenza A (H1N1) was first reported from Mexico this year (2009). The spectrum of disease caused by new influenza A (H1N1) virus infection ranges from non-febrile, mild upper-respiratory tract illness to severe or fatal pneumonia. Most cases appear to have uncomplicated, typical influenza-like illness and recover spontaneously. The most commonly reported symptoms include cough, fever, sore throat, malaise and headache.

Most commonly reported symptoms include
- cough
- fever
- sore throat
- malaise
- headache
Fever has been absent in some outpatients and in up to 1 in 6 surviving hospitalized patients. Gastrointestinal symptoms (nausea, vomiting and/or diarrhoea) have occurred in up to 38% of outpatients in the United States.1


Almost one-half of the patients hospitalized in the United States, and 21 of 45 (46%) fatal cases in Mexico, have had underlying conditions, including pregnancy, asthma, other lung diseases, diabetes, morbid obesity, autoimmune disorders and associated immunosuppressive therapies, neurological disorders and cardiovascular disease. Among 45 fatal cases in Mexico, 54% were among previously healthy people, most of whom were aged 20–59 years. Case fatality ratios were lower in children and teenagers than in adults, for reasons to be determined. Rapidly progressive respiratory disease has accounted for most severe or fatal cases.
“Rapidly progressive respiratory disease has accounted for most severe or fatal cases”

From the Chinese medicine viewpoint, this is due to transmission of external pathogenic factor from the Wei Level to the Qi Level with the pattern of Lung-Heat and then eventually to the Ying and Blood Level.
In Mexico, the median time from onset of illness to hospitalization was 6 days (range, 1–0 days) in 45 fatal cases, compared with a median of 4 days in hospitalized cases in the United States. In fatal cases, the presenting manifestations have included fever, shortness of breath, myalgia, severe malaise, tachycardia, tachypnoea, low oxygen saturation and, sometimes, hypotension and cyanosis. Several patients experienced cardiopulmonary arrest shortly after arrival at hospital. Diarrhoea has been uncommon in hospitalized cases.¹

1. Ibid.

Signs of influenza A(H1N1) are flu-like, including fever, cough, headache, muscle and joint pain, sore throat and runny nose, and sometimes vomiting and diarrhoea.
2. CHINESE MEDICINE VIEW

Influenza cannot be diagnosed and treated properly without a thorough understanding of the theory of the 6 Stages but particularly that of the 4 Levels. The beginning stages of an acute respiratory infection usually manifest with symptoms of invasions of exterior Wind.

The “Shang Han Lun” by Zhang Zhong Jing provided the earliest framework for the diagnosis and treatment of diseases from exterior Wind-Cold. Although this classic does also discuss invasions of Wind-Heat and their treatment, a comprehensive theory of exterior diseases from Wind-Heat was not developed until the late 1600s by the School of Warm Diseases (Wen Bing).

Zhang Zhong Jing (about 150-219AD)
Thus, the two schools of thought which form the pillars for the diagnosis and treatment of exterior diseases in Chinese medicine are separated by about 15 centuries: they are the School of Cold-induced Diseases (School of *Shang Han*) based on the “Discussion of Cold-induced Diseases” (“*Shang Han Lun*”) by Zhang Zhong Jing (c. AD 220) and the School of Warm Diseases (*Wen Bing* School) which started in the late 1600s and early 1700s.

The main advocates of this school were Wu You Ke (1582-1652), Ye Tian Shi (1667-1746) and Wu Ju Tong (1758-1836).

Ye Tian Shi is the author of *Wen Bing Lun*, Discussion on Warm Diseases.